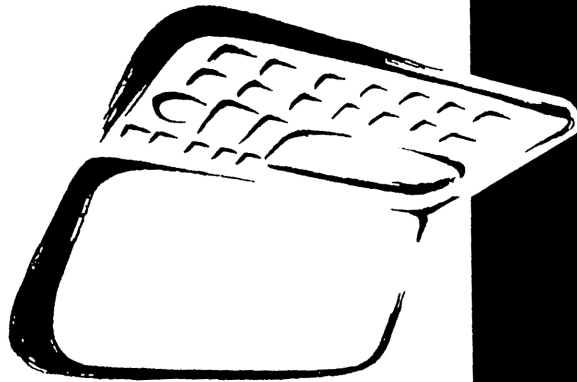


CASIO



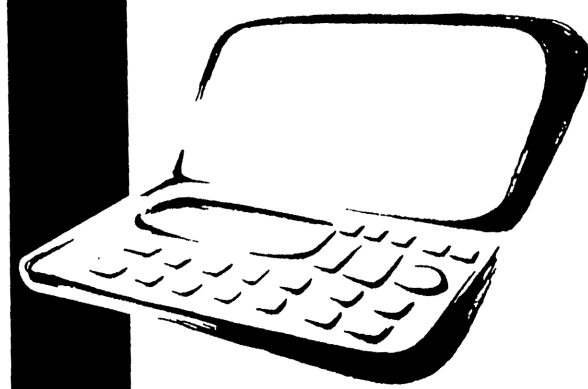
Guía del usuario

SF-4900ER
SF-4980ER
SF-4985ER

S

SF-4900ER
SF-4980ER
SF-4985ER

User's Guide



CASIO

E

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THIS UNIT IN THE U.S.A.
(not applicable to other areas).

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Proper connectors must be used for connection to host computer and/or peripherals in order to meet FCC emission limits.

Connector SB-62 SF Unit to SF Unit
Connector FA-127 SF Unit to PC

Declaration of Conformity

Model Number: SF-4900ER/4980ER/4985ER
Trade Name: CASIO COMPUTER CO., LTD.
Responsible party: CASIO, INC.
Address: 570 MT. PLEASANT AVENUE, DOVER, NEW JERSEY 07801
Telephone number: 973-361-5400

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT!

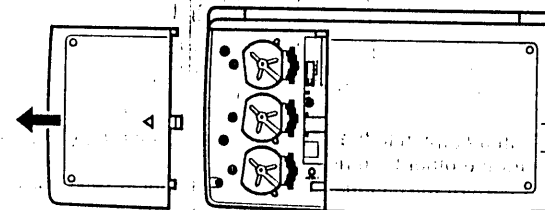
Please keep your manual and all information handy for future reference.

MO9905-A Printed in Malaysia
A342952-1 M&M

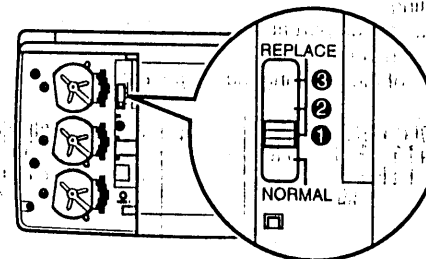
Before using the unit for the first time

Use the following procedure to load batteries and reset the unit before using it for the first time.

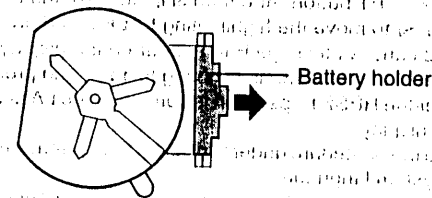
1. Slide the battery compartment cover in the direction indicated by the arrow.



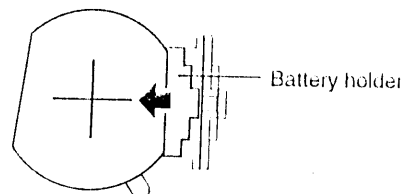
2. Slide the battery switch to the "REPLACE 1" setting.



3. Slide the battery holder in the direction indicated by the arrow in the illustration.



4. Load the new battery into the battery compartment, making sure that the positive (+) side of the new battery is facing up (so you can see it).
5. Slide the battery holder back to its original position as indicated by the arrow in the illustration.



6. Slide the battery switch to the "REPLACE 2, 3" setting and repeat steps 3 through 5 for the other batteries.
 - Be sure to load all three batteries, using CR2032 lithium batteries only. Never mix old batteries with new ones.
7. Slide the battery switch to the "NORMAL" setting.
 - You will not be able to turn the unit on if the battery switch is not in the "NORMAL" setting.
8. Replace the battery compartment cover.
9. Press ON to switch power on.
- At this time, one of the following messages appears on the display.

A ARE YOU USING A
NEW UNIT FOR THE
FIRST TIME?
YES/NO

B CLEAR MEMORY AND
SET UP THE UNIT
FOR OPERATION?
YES/OFF

- If Message B appears, skip step 10 and continue from step 11.
- If these messages do not appear, open the battery compartment and press the RESET button. And then skip step 10 and continue from step 11.
- 10. Use to move the highlighting to YES, and press SET.
- This causes Message B to appear on the display.
- 11. Use to move the highlighting to YES, and press SET.
- After the RESET operation is complete, the LANGUAGE screen appears on the display.
- 12. Use the procedure under "To select the system language" on page 5 to select a system language.
- 13. Check the Home Time setting and make changes if necessary (page 71)

About the EL backlight

- This unit is equipped with an EL backlight that allows easy viewing of display contents in a theater, or anywhere else where lighting is dim.
- Note, however, that frequent or extended use of the EL backlight shortens battery life.

The following shows how backlight use affects battery life under controlled test conditions.*

Backlight Operation	Battery Life
3 minutes per hour	Approximately 45 hours
15 minutes per hour	Approximately 25 hours

* Test Conditions

- "Battery Life" is the number of hours before battery failure when the unit is left on with 5 minutes of a processing operation and 55 minutes of continuous display only (no processing operation) per hour, plus the backlight operation described below.
- "Backlight Operation" is the number of minutes the backlight is turned on per hour during the display only (no processing operation) period.

Important!

The EL backlight may fail to operate when battery power is low, in order to conserve remaining battery power and protect data stored in memory.

Introduction

SF-4900ER/SF-4980ER/SF-4985ER

Congratulations on your selection of CASIO's new SF-4900ER/SF-4980ER/SF-4985ER (referred to as SF Unit in this manual). This innovative new personal data management tool features a selection of powerful functions, including:

- Telephone Directory
- Memo Mode
- Schedule Keeper
- To Do Mode
- Expense Mode
- Reminder Mode
- Calendar
- Clock with Home Time and World Time functions
- Calculator
- Conversion Mode
- Secret Function
- Data Communication

Functions are specially designed to be easy to understand and use, making your personal data management easier than ever before.

- All data stored in memory is erased if the SF Unit should malfunction, when you have it repaired, when the batteries go dead, and whenever you remove the batteries. **Be sure to make written back up copies of all important data.**

- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss resulting from the use of this manual.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any loss or claims by third parties which may arise through the use of the SF Unit.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss caused by deletion of data as a result of malfunction, repairs, or battery replacement. Be sure to back up all important data on other media to protect against its loss.

Multiple Language Capability

Multiple Language Capability

Your SF unit is capable of producing messages in any one of five different languages (English, German, French, Italian, Spanish). Use the following procedure to select the language you want.

To select the system language

1. Press **ON** to switch power on.
2. Enter the Telephone Directory Mode.
 - You could enter Memo, Reminder, Schedule Keeper, To Do, Expense, Calendar, Home Time, World Time or Conversion here.
3. Press **FUNC** three times to display the third function menu.
 - In the Calendar, Home Time, World Time or Conversion mode, press **FUNC** twice.
 - In the Expense Mode, press **FUNC** four times.
4. Press **1** to select **LANGUAGE**.
 - The above operation causes a list of five languages to appear on the display. The language that is currently selected is highlighted on the display.
5. Select the language you want to use.
 - You can directly specify a language by pressing the number key that corresponds to the language you want to use.

```
*LANGUAGE(1-5)*:  
1 DEUTSCH  
2 ENGLISH  
3 ESPANOL  
[CAPS]
```

```
*LANGUAGE(1-5)*:  
4 FRANCAIS  
5 ITALIANO  
[CAPS]
```

- You can also select a language by using **▲** or **▼**, to move the highlighting around the menu until the language you want to use is highlighted. Each time you move the highlighting, the title **LANGUAGE (1-5)** at the top of the screen changes to the language that is currently highlighted.

6. While the language you want to use is selected (highlighted), press **SET**.
 - To exit the language-selection menu without changing the current language, press **ESC**.
 - The system language automatically changes to English whenever you perform the **RESET** operation (page 19).

About this manual...

This manual is divided into 7 parts.

PART 1 Getting Started

Be sure to read this part of the manual before doing anything else! It includes important information that you need to know in order to use the SF Unit correctly.

PART 2 Operation Reference

This part of the manual gives you more detail about the fundamental operation of the SF Unit. It provides all of the detail you need to help you use the SF Unit to its full potential. It also helps you to get acquainted with the keys, features, and functions of the SF Unit. It tells you where everything is located, what the display indicators mean how to adjust the display contrast, and other important information.

PART 3 Data Management Functions

This part of the manual details the versatile data management functions of the SF Unit. It describes the procedures required for data storage, recall and editing in the Telephone Directory, the Memo Mode, the Schedule Keeper, the To Do Mode, the Expense Mode, and the Reminder.

PART 4 Timekeeping Functions

Your SF Unit includes powerful timekeeping functions that help to keep you on time all the time. The Home Time function lets you set the current time for your home, specifying 12-hour or 24-hour format, standard time or summer time, even your hometown name. The World Time function gives you instant access to the current time in any one of 29 time zones around the globe.

PART 5 Calculator Functions

The SF Unit also gives you the capability to perform all of the mathematical operations available on today's calculators. In addition, you also get an innovative date calculation function that makes it possible to perform addition and subtraction operations that involve dates.

Conversion modes describe functions for converting between three national currencies, or between euros and national currencies.

PART 6 Data Communications

The data communications capabilities of the SF Unit let you transfer data between two SF Units, between the SF Unit and the CASIO CSF Unit or NX Unit, or between the SF Unit and a personal computer.

PART 7 Technical Reference

This part of the manual provides technical information on troubleshooting, user maintenance, specifications, etc.

Manual conventions

This manual uses the following conventions when mentioning key operations and functions within text.

- Keys are indicated using upper-case bold characters **LIKE THESE**.
- When a key has more than one function, only the function under discussion at that time will be noted. With the **ON/CLEAR** key, for example, **ON** will be used to indicate switching the SF Unit on, while **CLEAR** will be used to indicate the clear operation.
- Text that appears on the display of the unit is represented in this manual using a font that is different from the explanatory text. The display text "NAME?" for example represented as: NAME?.
- Note that operation of this unit's **SHIFT** key is different from that normally found on a computer's keyboard. For the operation **SHIFT CLEAR**, for example, you should not hold down the **SHIFT** key while you press **CLEAR**. Instead, you should press and then release the **SHIFT** key, and then press the **CLEAR** key.

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Read this first!

You must be familiar with the following information in order to use the SF Unit correctly. It tells you what to do in order to avoid losing important data stored in memory. Please be sure to read the following before using the SF Unit!

Make back up copies of important data!

Your SF Unit employs electronic memory, which makes it possible to store large volumes of data and to recall stored data quickly and easily. Data is retained as long as power is supplied by the batteries. This means that should batteries go dead, or if you make a mistake while replacing batteries, the data stored in memory may be damaged or lost entirely. Data contents can also be damaged or lost due to strong electrostatic charge, strong impact, or extremes in temperature and humidity.

All of this means that you should make back up copies of important data in a notebook in case any of the above conditions occur.

About the “ARE YOU USING.....” and “CLEAR MEMORY.....” messages...

Whenever you turn on the power of the SF Unit, It performs a self-check before beginning operation. If a problem is discovered during the self-check, the SF Unit displays one of the following messages.

A ARE YOU USING A
NEW UNIT FOR THE
FIRST TIME?
YES/NO

B CLEAR MEMORY AND
SET UP THE UNIT
FOR OPERATION?
YES/OFF

Note

- The above messages always appear in English, regardless of the system language setting.

If this is the first time you ever turned on the SF Unit...

Perform the RESET procedure under "Before using the unit for the first time" on page 1, starting from step 9.

If this is not the first time you are using the SF Unit...

There is probably a problem with the data in memory (data error). Note that once data is lost it cannot be recovered. Such data errors are generally caused by one of the following problems.

- Interruption of battery power.
- Severe electrostatic charge, impact, change in temperature, or change in humidity.
- Hardware problem.

After a data error is discovered, you will not be able to input or edit data. In order to return memory to normal (allowing further input and editing of data), you must perform the RESET operation to clear the memory of all data. Before doing so, you may want to recall important data and write it down (if you don't already have a copy). You can then re-input the data after clearing the memory. The RESET procedure you should use depends on the type of message error message on the display.

"ARE YOU USING A NEW UNIT FOR THE FIRST TIME?"

1. Make sure that **NO** is highlighted and then press **SET**. If **YES** is highlighted, press **▶** to move the highlighting to **NO** and then press **SET**.
- The message "DATA ERROR! CHECK YOUR USER'S GUIDE FOR PROCEDURE!" appears on the display at this time. After this message appears, you can press **CLEAR** to clear it from the display and recall data in order to make a back-up record of it before continuing.
2. Press the **RESET** button, which is located inside the battery compartment cover on the back of the unit.
- This causes the "CLEAR MEMORY AND SET UP THE UNIT FOR OPERATION?" message to appear on the display.
3. Press **◀** to move the highlighting to **YES** and then press **SET** to reset the unit.
- Highlighting **NO** and pressing **SET** clears the reset message and displays the Home Time screen.

"CLEAR MEMORY AND SET UP THE UNIT FOR OPERATION?"

1. Make sure that **YES** is highlighted. If **OFF** is highlighted, press **◀** to move the highlighting to **YES**.
- Highlighting **OFF** and pressing **SET** turns off the unit without resetting the unit.

2. Press **SET** to reset the unit.

If you still have trouble after trying the RESET operation, you may have a hardware problem. If so, consult with your nearest CASIO dealer.

General Precautions

- Never try to take the SF Unit apart.
- Avoid strong impact and sudden temperature changes.
- At very low temperatures, the display response time may slow down or the display may fail completely. This is temporary and correct operation should return at normal temperature.
- To avoid serious damage to the SF Unit caused by leaking batteries, replace batteries once every two years, regardless of how much you use the SF Unit during that time.
- Never use thinner, benzene or other volatile agents to clean the exterior of the SF Unit. Instead, wipe it off with a soft cloth dampened in a solution of water and a mild, neutral detergent. Wring the cloth out until it is almost dry.
- If the SF Unit is exposed to strong electrostatic charge, the display may dim or the SF Unit may lock up. To correct this situation, switch power off, and then remove and then replace the batteries.
- Do not press the keys with a pen, pencil or other sharp object.
- The SF Unit may cause interference with radio or television reception. Keep it away from such appliances when you are using it.
- Note that pressing **SHIFT** and then **LIGHT** causes the backlight to light and stay lit as long as you continue to operate the SF Unit, or until you press **LIGHT** again to turn it off manually.

Leaving the backlight on for long periods greatly reduces battery life!

About the Power Supply

The SF Unit is powered by three CR2032 lithium batteries. Replace batteries as soon as possible after low battery power is indicated by any of the following.

- Low battery message appears on the display
- Blank display when power is turned on
- Dim display figures even after display contrast is adjusted
- Failure of the backlight to turn on

Caution

- All data stored in memory is lost if you remove more than one battery at the same time.
- Be sure that you keep a separate copy of all important data that you store in the SF Unit.

Low Battery Message

A message appears on the display to warn you when the batteries power drops below a certain level. Should battery power drop too low, data in memory may be corrupted or lost. Whenever a low battery power message appears on the display, be sure to stop operation of the SF Unit and replace batteries as soon as possible.

Important!

Whenever the message "WEAK BATTERIES! CONSULT YOUR USER'S GUIDE IMMEDIATELY!" appears, be sure to replace all batteries.

Battery Precautions

Incorrectly using batteries can cause them to burst or leak, possibly damaging the interior of the SF Unit. Note the following precautions.

- Be sure that the positive (+) side of each battery is facing up (so you can see it).



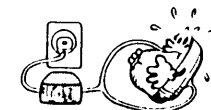
- Never mix batteries of different types.



- Never mix old batteries and new ones.



- Never leave dead batteries in the battery compartment.
- Remove the batteries if you do not plan to use the SF Unit for a long period.
- Replace batteries at least once every year, no matter how much you use the SF Unit during that period.
- Never try to recharge the batteries supplied with the SF Unit.
- Do not expose batteries to direct heat, let them become shorted, or try to take them apart.



- Should a battery leak, clean out the battery compartment of the SF Unit immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.

Keep batteries out of the reach of small children. If swallowed, consult with a physician immediately.

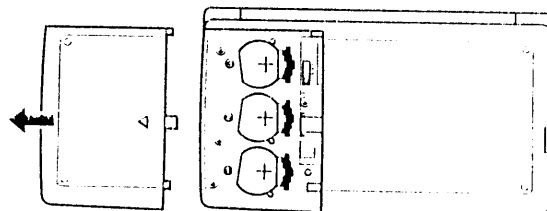
The batteries that come with this unit discharge slightly during shipment and storage. Because of this, they may require replacement sooner than the normal expected battery life.

To replace the batteries

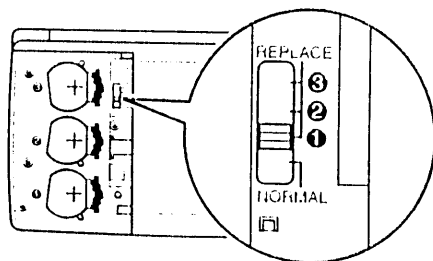
Before replacing the batteries, note the following precaution:

- Be sure to replace all batteries with a full set of new ones, and do not mix old batteries with new ones.
1. Press **OFF** to switch power OFF.

2. Slide the battery compartment cover in the direction indicated by the arrow.



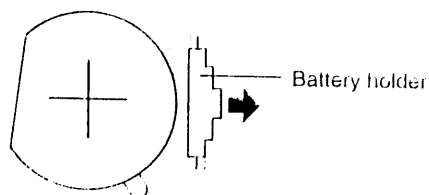
3. Slide the battery switch to the "REPLACE 1" setting.



4. Slide the battery holder in the direction indicated by the arrow in the illustration.

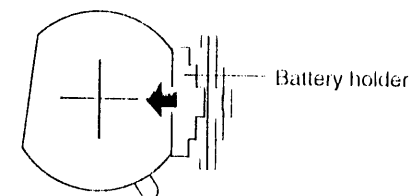
Caution

Be sure to remove only one battery at a time. Otherwise, you will lose all data stored in memory.



5. Replace the old battery with a new one, making sure that the positive (+) side of the new battery is facing up (so you can see it).

6. Slide the battery holder back to its original position as indicated by the arrow in the illustration.



7. Slide the battery switch to the "REPLACE 2, 3" setting and repeat steps 4 through 6 for the other batteries.
- Be sure to replace all three batteries, using CR2032 lithium batteries only. Never mix old batteries with new ones.
8. Slide the battery switch to the "NORMAL" setting.
- You will not be able to turn the unit on if the battery switch is not in the "NORMAL" setting.
9. Replace the battery compartment cover.

Resetting the SF Unit's Memory

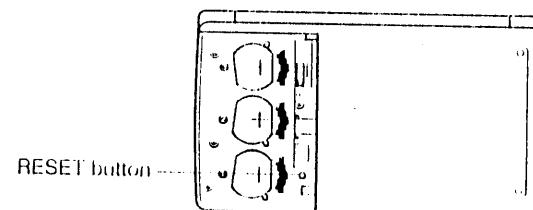
Warning!

The following procedure erases all data stored in the memory of the SF Unit. Perform the following operation only when you want to delete all data and initialize the settings of the SF Unit.

Remember - you should always keep copies of important data by writing it down, by transferring it to a personal computer or other SF Unit, CSF Unit or NX Unit.

To reset the SF Unit's memory

1. Press ON to switch power on.
2. Open the battery compartment and press the RESET button.



- At this time the following message appears on the display.

```

CLEAR MEMORY AND
SET UP THE UNIT
FOR OPERATION?
YES/NO
    
```

- Make sure that YES is highlighted. If NO is highlighted, press ◀ to move the highlighting to YES.

Warning!

The next step deletes all data stored in the SF Unit's memory. Make sure that you really want to delete the data before you continue!

- Press SET to start the RESET procedure.
- After the RESET operation is complete, the LANGUAGE screen appears on the display.
- Use the procedure under "To select the system language" on page 5 to select a system language.
- After you set the system language, the Home Time Screen appears.
- Check the Home Time setting and make changes if necessary (page 71).

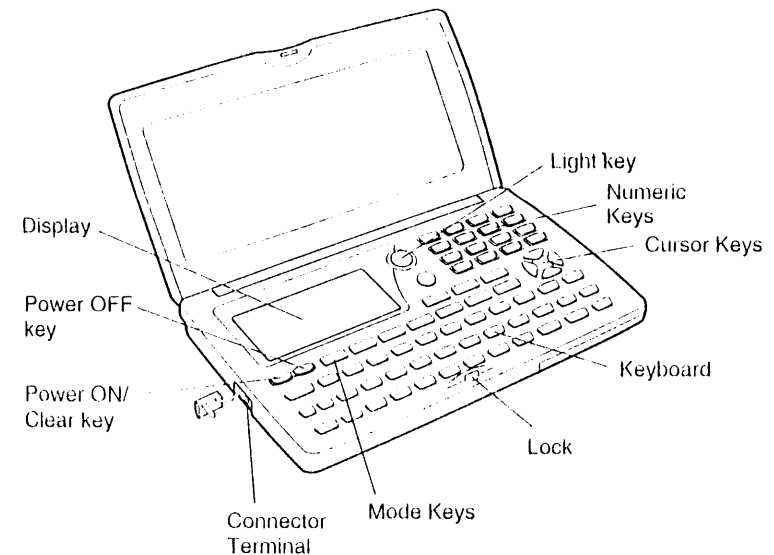
Following the reset operation described above, the Home Time display appears and the SF Unit settings are initialized as noted below.

Home Time:	LON
	JAN/ 1/2000 SAT
	12:00 AM
	12-hour format
World Time:	NYC
Daily Alarm:	12:00 PM
Sound:	Schedule alarm — ON
	Reminder alarm — ON
	Daily alarm — OFF
	Key — ON
Messages:	English
Character input:	CAPS

Operation Reference

General Guide

The following illustration shows the names of the main controls of the SF-4900ER/SF-4980ER/SF-4985ER.



Setting Up the SF Unit

After batteries are loaded, use the following procedures to set up the SF Unit for operation.

To switch power on and off

- Press ON to switch power on.
- The initial screen for the mode that was selected when you last switched power off appears on the display.

- If either of the messages (A or B) shown on page 13 appears on the display, follow the procedures described on page 14.
 - If a low battery power message appears on the display or if the display remains blank when you turn power on, replace batteries as soon as possible.
2. Press **OFF** to switch power off.

About the Auto Power Off function...

The SF Unit is equipped with an Auto Power Off function that switches power off automatically whenever you do not perform any key operation for about six minutes. To restore power, press **ON**.

To turn on the EL backlight

There are two ways to turn on the backlight of the display. Pressing **LIGHT** causes the backlight to turn on for about 15 seconds, and then turn off automatically.

Pressing **SHIFT** and then **LIGHT** also turns on the backlight, but in this case the backlight stays on as long as you keep performing key operations on the SF Unit. The backlight turns off automatically if you do not perform any key operation for about 15 seconds.

Leaving the backlight on for long periods greatly reduces battery life!

You can manually turn the backlight off by pressing **LIGHT** again.

Failure of the backlight to turn on indicates low battery power. Replace batteries as soon as possible.

To adjust the display contrast

1. Enter the Telephone Directory Mode.
- You could enter any mode except the Calculator Mode here.
2. Press **SHIFT CONTRAST**.
3. Use the **◀** and **▶** keys to adjust the contrast.



4. After you are finished, press **ESC** to clear the contrast adjustment display.

To select a mode

Press one of the mode keys to select the mode you want.

In cases where two modes are assigned to the same key, each press of a key toggles between the two modes.

 **TEL**

Telephone Directory Mode for storage of telephone numbers, names, addresses, and six user-definable entries.

 **MEMO/TO DO**

- Memo Mode for storage of unformatted data in a kind of electronic notebook.

- To Do Mode for storage of reminders of things to do. You can affix a check mark to items as you complete them, and even note the date that you check them.

 **HOME/WORLD**

Home Time/World Time Modes for display of the current time in your hometown and other locations around the globe. For example, you can set New York as your home time and London as the world time.

 **EXP/REM**

- The Expense Mode lets you store expense data, including payment date, payment method, description, etc. You can also produce total for a specific period of time.

- Reminder Mode to create reminders and alarms for annual, monthly, and daily events.

 **SCHEDULE**

Schedule Keeper Mode for storage of appointments scheduled for specific dates and times, and setting of Schedule Alarms to remind you of your appointments.

 **CALENDAR**

Displays any monthly calendar from January 1901 through December 2099.

 **CAL/CONV**

- Calculator Mode for basic calculations with the touch of a key.

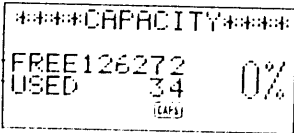
- The Conversion Mode lets you select between general conversion and euro conversion.

To check the memory status

Press **SHIFT** and then hold down **CAPA** to display a screen that shows the current memory status. To clear the memory status display, release **CAPA**.

You can enter any mode except the Calculator Mode, Conversion Mode and Home/World Time Mode here.

Remaining memory capacity
Total number of characters stored in memory



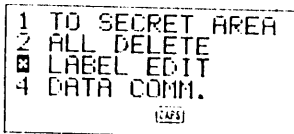
****CAPACITY****
FREE 126272
USED 34 0%
(CAPS)

Note

The screen example shown here is the SF-4900ER. The capacity values (FREE and USED total) is different on the SF-4980ER/SF-4985ER display.

To use the FUNCTION key

Press the **FUNC** key to display a function menu that makes it possible to perform functions that are not marked on the unit's keys.

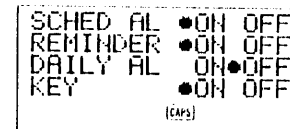


1 TO SECRET AREA
2 ALL DELETE
3 LABEL EDIT
4 DATA COMM.
(CAPS)

Just like in the above example display, all of the functions included in a function menu have a number at the beginning. Press the number key that corresponds to the function you want to perform. Whenever a function menu item's leading number is replaced by "X", it means you can't select that menu item in the operation you are performing.

About the SOUND menu...

The sound menu lets you switch the key input tone and the various alarms of the SF Unit on and off.



SCHED AL ● ON OFF
REMINDER ● ON OFF
DAILY AL ● ON OFF
KEY ● ON OFF
(CAPS)

The on/off status of each SOUND menu item is indicated by a dot (●) as shown above.

To switch the key input and alarm tones on and off

1. Press **FUNC** once to display the first function menu.
- In the Expense Mode, you should press **FUNC** twice.
2. Press 4 to select the SOUND menu item.
3. Use the **▲** and **▼** keys to move the dot to the item you want to change.
4. Use **◀** and **▶** to switch the key input tone or an alarm tone on and off.
5. Repeat steps 3 and 4 to change other items if you want.
6. Press **SET** to store your setting and clear the SOUND menu.

About alarm types

This unit has three types of alarms: the Daily Alarm, Schedule Alarm, and Reminder Alarm. The following describes each of these alarms.

Daily Alarm

The Daily Alarm sounds at the same time everyday, when the Home Time reaches the time you have set as the Daily Alarm (page 73).

Reminder Alarm

The Reminder Alarm sounds on the same date each month or each year, or at the same time everyday. Use the Reminder Mode to set this type of alarm (page 58).

Schedule Alarm

The Schedule Alarm sounds at the specified time on a specified date. Use the Schedule Keeper Mode to set this type of alarm (page 43).

An alarm tone sounds for about 20 seconds and an alarm message appears on the display whenever an alarm time is reached, even if unit power is switched off. You can stop the alarm by pressing any key and then press **ESC** to return to the display that was shown before the alarm began to sound.

Important!

- An alarm will not sound if that type of alarm is switched off on the **SOUND** menu. This is especially important to remember when you want to use Reminder and Schedule Alarms. For details on how to switch alarms on, see "About the **SOUND** menu..." on page 25.
- If the Daily Alarm set in the Home Time Mode and a Daily Reminder alarm set in the Reminder Mode are set for the same time, the Daily Reminder alarm takes precedence. This means that the Daily Reminder message appears on the display when the alarm time is reached.
- The alarm does not sound if you are performing a data communications operation when the alarm time is reached.
- The alarm may fail to sound if battery power is too low.

Note

If the message "SECRET DATA" appears on the display, it means that an alarm time set in the secret memory area (see page 66) was reached.

Inputting Letters, Numbers and Symbols

The following describes the basic input operations for the SF Unit. Note that you can use the following operations to input data only in the Telephone Directory, the Memo Mode, the Schedule Keeper, the To Do Mode, the Expense Mode, and the Reminder.

In all of the following operations, the input or correction is performed at the current cursor location. To move the cursor around the display, use the **▲**, **▼**, **◀**, and **▶** cursor keys. Press **SHIFT** and then **◀** to make the cursor jump to the first character of an entry, or **SHIFT ▶** to jump to the end of an entry.

Note

Every character and symbol you input is counted as an input character. Next (**▲**) and new-line (**+**) symbols are also counted as input characters. The maximum number of input characters that can be stored for each data item is 384. When the number of characters you are inputting into the current data item exceeds 374, the cursor changes shape from " " to "■". This indicates that you can input only 10 more characters for the current data item.

To input letters and numbers

Press the key that is marked with the letter or number that you want to input.

To input upper-case letters

Press **CAPS** to switch the keyboard between upper-case and lower-case letters. The indicator "CAPS" on the display shows that the keyboard is shift-locked for upper-case letters.

- The upper-case/lower-case setting you make with **CAPS** remains in effect until you change it, even when you switch the SF Unit off.
- A shift-lock operation using **CAPS** affects the letter keys only. It does not shift the number keys for punctuation symbol input.

To shift the keyboard

Press **SHIFT** to temporarily shift the keyboard between upper-case and lower-case letters. The indicator "SHIFT" on the display shows that the keyboard is shifted.

- If the keyboard is shift-locked for upper-case input, pressing **SHIFT** shifts to lower-case. If the keyboard is set for lower-case letters (by the **CAPS** key), pressing **SHIFT** changes to upper-case.
- With **SHIFT**, the keyboard remains shifted for input of one character only. As soon as you input one character, the keyboard switches back to the status set by **CAPS**.

To input accented characters

Press the **CODE** key and confirm that the "CODE" indicator is on the display. Next, input the character. The following character accents are available.

- Umlaut (Ä, Ê, Î, Ö, Ü, ä, ê, î, ö, ü) **CODE F**
- Acute Accent (Á, É, Í, Ó, Ú, á, é, í, ó, ú) **CODE A**
- Grave Accent (À, È, Ì, Ò, Ù, à, è, ì, ô, u) **CODE S**
- Circumflex (Â, Ê, Î, Ô, Û, â, ê, î, ô, û) **CODE D**
- Tilde (Ã, Õ, Ñ, ã, õ, ñ) **CODE G**

To input other symbols

1. Press **SYMBOL** to display a menu of numbered symbols.
 - There are a total of 8 symbol menu screens.

\$	!	"	#	\$	%	&	'
(	)	*	,	/	:	;	<
>	?	@	[	\	]	^	{
!	}	~	i	l	l	Æ	Ç
À	Ø	ß	¶	©	ij	æ	ç
à	ø	£	¥	Ω	°	°	x
÷	±	°	²	³	μ	½	¼
¾	f	l	Fr	←	→	√	€

- To clear the symbol menu from the display without inputting a symbol, press **ESC**.
2. Use **▲** and **▼** to scroll through the symbol menu screens until the one that contains the symbol you want appears on the display.
 3. Press the number key (1 thru 8) that matches the number to the left of the symbol you want to input. The symbol is input at the current cursor position and the symbol menu is cleared from the display.

To correct, delete or insert characters

To correct a character, simply move the cursor to the location of the character and input the character you want to change to.

To delete a character, move the cursor to the character you want to delete and press **DEL**.

- To insert a character, move the cursor to the desired position. Press **SHIFT INS** and then type the character you want.

Date and time input

The following guidelines apply to inputting dates and times in the Schedule Keeper and Reminder Modes, and dates in the Expense Mode.

- Years can be input within the range of 1901 through 2099.
- Pressing **TIME/DATE** or **►** while there is nothing inside the year input area inputs 2000.
- An input value from 1 to 49 for the year is automatically converted to the corresponding 21st century year (2001 to 2049). A value from 50 to 99 is converted to the corresponding 20th century year (1950 to 1999).
- You must input all four digits to specify a date from 1901 to 1949 or from 2050 to 2099.
- Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
- You do not have to input the minutes if they are "00".
- If you are using 12-hour time format, press **A** to specify AM or **P** to specify PM.
- All illegal input (13 for the month, for example) is ignored.

PART 3

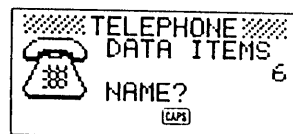
Data Management Functions

This part of the manual describes how to input and store data in the Telephone Directory, Memo, Schedule Keeper, To Do, Expense and Reminder Modes. It also describes how the Calendar Mode can be used in combination with the Schedule Keeper Mode.

To enter a mode

Press the mode key that corresponds to the mode that you want to enter. When you enter the Telephone Directory, Memo Mode, To Do Mode or Reminder Mode, an initial screen appears on the display.

In cases where two modes are assigned to the same key, each press of a key toggles between the two modes.



About display formats

There are two display formats used in the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode and Reminder Mode: a data display format and an index display format. The data display shows all of the data entries contained in a data item, while an index display abbreviates each data item into one or two lines. The index display makes it possible to quickly scroll through data items to find the one that you want.

You can switch between the data display and index display formats at any time by pressing **DISP CHNG**.

Data Display

ANDERSON JACK
234-228-8333
JC.aj@***.com
1710 T.D. Street
(CAPS)

You can scroll through a data display line-by-line using the ▲ and ▼ cursor keys. If you press **SHIFT** before ▲ and ▼, the display scrolls data item-by-data item.

Index Display

ANDERSON JACK
234-228-8333
CASIO
666-6666
(CAPS)

You can scroll through an index display data item-by-data item using the ▲ and ▼ cursor keys. If you press **SHIFT** before ▲ and ▼, the display scrolls one screen at a time.

Using the Telephone Directory

The innovative Telephone Directory Mode of the SF Unit lets you input names, telephone numbers, and addresses (e-mail/home) for instant look up when you need them. It even gives you a total of six user-definable items that you can use to record birthdays, hobbies, or any other information you want. Each Telephone Directory data item can contain up to 384 characters (including next and newline symbols).

About Telephone Directory data items and data entries...

Telephone Directory information is stored in units called data items. Each data item is made up of a number of data entries. Telephone Directory data items are made up of nine entries: Name, Number, Addresses (e-mail/home) plus 6 FREE entries (FREE 1 ~ FREE 6). These "FREE" entries can be used to store any type of data you want. You can even change the FREE labels to create your own named entries.

Inputting Telephone Directory data

Use the following procedure to input Telephone Directory data.

Note

- Telephone Directory data is automatically sorted according to name entries. See "Auto Sort Sequence" for information on how this unit sorts data.

To input Telephone Directory data

Example: To input the following data.

Name: ERIC JACKSON

Phone Number: 123-4567, 987-5432

E-mail address: eric@***.com

- Enter the Telephone Directory Mode. At this time, you could press **CLEAR** to clear the initial Telephone Directory screen and change to the name input screen.

Prompt for name input

NAME?
▲
▲
▲
[CAPS]

- Input the name with the last name first, since the data is sorted according to the name entry.
- Press **NEXT**. You can press the ▼ key in place of the **NEXT** key. The "NUMBER?" prompt appears to ask you to input the telephone number.

JACKSON ERIC▲
NUMBER?
▲
▲
[CAPS]

- Input the telephone number.

JACKSON ERIC▲
123-4567+
987-5432-
▲
[CAPS]

- After inputting a telephone number, press **NEXT** to advance to address input.

JACKSON ERIC▲
123-4567+
987-5432-
E-MAIL/ADDRESS?
[CAPS]

- Input the e-mail address and home address.
 - The display scrolls automatically as you input more data.
- After inputting the e-mail address and home address, press **NEXT** to advance to the FREE input.

123-4567+
987-5432-
eric@***.com▲
FREE 1?
[CAPS]

- Input any other information you want.

9. After inputting all of the data you want, press **SET** to store it in memory.

```
JACKSON ERIC
123-4567
987-5432
eric@***.com
(CAPS)
```

- You can press **SET** at any point in the above procedure to store the data you have input up to that point.

To change a FREE entry label

- Press **TEL** and display the initial screen of the Telephone Directory Mode.
- Press **FUNC** twice to display the second function menu.
- Press **3** to select **LABEL EDIT**.
- To clear the function menu without selecting anything, press **ESC**.

```
FREE 1
FREE 2
FREE 3
FREE 4
(CAPS)
```

- Use **▲** and **▼** to move the cursor between the **FREE** labels.
 - To cancel the editing operation without making any changes, press **ESC** or **CLEAR**.
- When the cursor is located at the text you want to change, enter the text you want.
 - Labels can be up to 14 characters long.
- After making the changes you want, press **SET** to store them.
 - The labels you create appear as prompts when you are inputting Telephone Directory data.

Where to find other information

- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory" on page 59.
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting and Copying data" on page 62.

Using the Memo Mode

The Memo Mode of the SF Unit is like a pad of electronic memo paper that lets you store information in any format you want. You can input Memo Mode data by adding new memos to the end of data already in memory, or you can insert new memo data between two existing Memo Mode data items. Each Memo Mode data item can contain up to 384 characters (including newline symbols).

To input Memo Mode data

- Enter the Memo Mode. At this time, you could press **CLEAR** to clear the initial Memo Mode screen and change to the memo input screen.

Prompt for memo input

```
MEMO?
(CAPS)
```

- Input the first line of memo data you want to store.
 - Note that the first line of memo data is treated as the memo's name. Because of this, it is a good idea to use a short descriptive title as the first line.
- Input the rest of your data.

```
SHOPPING LIST
TOWEL $4.95
SOAP $0.95
SHAMPOO $1.25
(CAPS)
```

— Newline symbol

- After inputting all of the data you want, press **SET** to store it in memory.

To insert a new Memo Mode data item between two items in memory

- Enter the Memo Mode.
- Recall the data item you want to come after the new data item you are about to input, and move the name of the data item into the top line of the display. (See "Recalling data stored in memory" on page 59)
- Input the new data item.

4. Press **SHIFT SET** to store the new data item.

- If you press **SET** without pressing **SHIFT**, the new data item is automatically stored at the end of the data already existing in memory.

Where to find other information

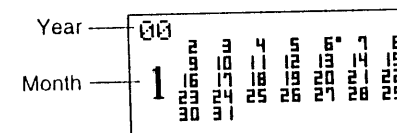
- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory" on page 59.
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting and Copying data" on page 62.

Using the Calendar

The calendar is pre-programmed to display full-month calendars of any month from January 1901 through December 2099.

To display the calendar

Press **CALENDAR** to enter the Calendar Mode.



- The dates on each calendar are shown starting from Sunday (on the far left) through Saturday (on the far right).
- The above procedure displays the calendar that contains the date currently set in the Home Time display.
- If you press **CALENDAR** while the Home Time display is shown, the calendar appears with the current date flashing within the calendar.
- When you press **CALENDAR** right after you are in the Schedule Keeper or the Expense Mode, the calendar that contains the Schedule Keeper or the Expense Mode date you were viewing appears. In this case, the Schedule Keeper or the Expense Mode date you were viewing appears flashing within the calendar.

To scroll through calendars

1. Press **CALENDAR** to display the Calendar Mode.
 2. Use the **▲** and **▼** cursor keys to scroll sequentially through the calendars. Holding down either key scrolls at high speed.
- The above procedure works only when the date cursor is not flashing in the calendar. To clear the date cursor from the calendar, press **ESC**.

About the date cursor...

- The date cursor flashes at a date in a calendar to indicate that the date is selected.
- If a calendar is already shown on the display, press the **►** cursor key to make the date cursor appear at the first date in the calendar, or the **◄** cursor key to make it appear at the last date in the calendar.

- You can make the date cursor appear at any specific date within a displayed calendar by entering that date. For example, pressing 1 2 causes the 12th to start flashing in the displayed calendar.
- You can move the date cursor around the calendar using the ▲, ▼, ◀, and ▶ cursor keys.
- To clear the date cursor from a calendar, press ESC.

To specify a month for display in the Calendar Mode

1. While a calendar is displayed, press **CLEAR**.
2. Input the year of the calendar you want to display and press **TIME/DATE**.
3. Input the month of the calendar you want to display.
4. Press **CALENDAR**. The calendar for the month you specified is displayed.

To specify a month and date for display in the Calendar Mode

1. While a calendar is displayed, press **CLEAR**.
2. Input the year of the calendar you want to display and press **TIME/DATE**.
3. Input the month of the calendar you want to display and press **TIME/DATE**.
4. Input the date and press **TIME/DATE** or **CALENDAR** to display the calendar for the month you specified. The date cursor is flashing within the calendar at the date you specified.

To highlight and unhighlight specific dates

1. Press **CALENDAR** to display the Calendar Mode.
2. Display the calendar that contains the date you want to highlight.
 - You can either scroll through calendars using ▲ and ▼, or you can specify the month.
3. Use the date cursor to select the date that you want to highlight.
4. Press **SET** to highlight the date currently selected by the date cursor.
 - To unhighlight the date, press **SET** again.
5. After you highlight the dates you want, press **ESC** to clear the date cursor from the calendar.

To highlight days of the week for multiple months

1. Press **CALENDAR** to display the Calendar Mode.

2. Display the calendar from where you want highlighting to start.
 - You can either scroll through calendars using ▲ and ▼, or you can specify the month.
3. Press **FUNC** twice to display the second function menu.
4. Press 3 to select **MULTIPLE HL**.
 - To clear the function menu without highlighting anything, press **ESC**.
5. Input the year of the calendar where you want the highlighting to end and press **TIME/DATE**.
6. Input the month of the calendar where you want the highlighting to end and press **TIME/DATE**.

SUN flashes because
it is selected.

SUN	MON	TUE	WED
THU	FRI	SAT	
PRESS (SPACE)			

7. Use the cursor keys to select the day of the week you want to highlight.
8. Press **SPACE** to specify the currently selected day of the week for highlighting.
 - When a day of the week is specified for highlighting, its abbreviation appears highlighted (reverse field) on the display.
 - To deselect (unhighlight) a day of the week, select it and press **SPACE**.
9. After specifying all of the days of the week you want highlighted during the period you specified in steps 2 through 6 above, press **SET** to highlight the applicable dates.

To unhighlight all dates in a specific month

1. Press **CALENDAR** to display the Calendar Mode.
2. Display the calendar for the month whose dates you want to unhighlight.
 - You can either scroll through calendars using ▲ and ▼, or you can specify the month.
3. Press **FUNC** once to display the first function menu.
4. Press 2 to select **MONTH DELETE**.
 - To clear the function menu without deleting anything, press **ESC**.
5. Press **SET** to clear all highlights from the month you specified in step 2 above or **ESC** to abort the operation without deleting anything.
 - Remember that the delete operation cannot be undone.

To unhighlight all dates up to a specific month

1. Press **CALENDAR** to display the Calendar Mode.
2. Press **FUNC** twice to display the second function menu.
3. Press **2** to select **ALL DELETE**.
 - To clear the function menu without unhighlighting anything, press **ESC**.
4. Input the year of the calendar where you want the unhighlighting to end and press **TIME/DATE**.
5. Input the month of the calendar where you want the unhighlighting to end and press **TIME/DATE**.
6. Press **SET** to clear all highlights from January 1901 up to the month you specified in steps 4 and 5 above, or **ESC** to abort the operation without deleting anything.
 - Remember that the delete operation cannot be undone.

Using the Schedule Keeper

The Schedule Keeper lets you store data about your appointments to keep you on time all the time. It lets you input the time and a description of your appointment. You can even set Schedule Alarms that remind you when it is time to get ready for your appointments. When you input data for a specific date, a marker appears next to that date on the calendar to let you keep track of your schedule at a glance. Each Schedule Keeper data can contain up to 384 characters, including newline symbols.

Note

- When there is a lot of Schedule Keeper data stored in memory, operations such as display of the calendar and data communication take more time.

To enter the Schedule Keeper

You can use either of the two following methods to enter the Schedule Keeper.

- Press **SCHEDULE**. The Schedule Keeper screen for the current date set on the Home Time display appears.
- Display the calendar and move the cursor to the date you want, then press **SCHEDULE**. The Schedule Keeper screen for the day you select appears on the display.

To specify a date

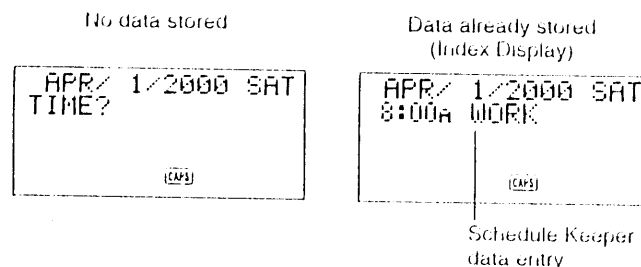
Schedule Keeper data is stored along with its date, with the date being treated as a separate data entry. Use the following procedure to specify a date in the Schedule Keeper Mode.

1. Press **SHIFT CLEAR**.
2. Input the year and press **TIME/DATE**.
3. Input the month and press **TIME/DATE**.
4. Input the date and press **TIME/DATE**. The Index Display that contains that date appears on the display.

About Schedule Keeper data and initial displays...

Schedule Keeper information is stored under dates, with each date acting as a unit called a data item. Each data item is made up of a number of data entries.

In the Schedule Keeper, the appearance of the currently displayed date depends on whether or not Schedule Keeper data is already stored under that date.



In the case of the display on the right (data already stored), you can display the "TIME?" prompt by pressing **CLEAR**.

To input Schedule Keeper data

1. Press **SCHEDULE** to enter the Schedule Keeper, and enter a date as instructed in "To specify a date".
2. Press **CLEAR**.
 - You can skip this step.
3. Input the starting time of the appointment, pressing **TIME/DATE** between the hour and the minutes.
 - If you are using the 12-hour timekeeping format, be sure to press **A** to specify AM or **P** to specify PM when inputting time.
 - To create a Schedule Keeper data entry with a description only (without any start time or end time), press **NEXT** (to advance directly to step 7) without entering a time. You can press the **▶** key in place of the **NEXT** key.
4. Press **TIME/DATE** again.
 - To create a Schedule Keeper data entry with a start time and description only (without any end time), press **NEXT** (or **▶**) (to advance directly to step 7) instead of **TIME/DATE**.
5. Input the ending time of the appointment, pressing **TIME/DATE** between the hour and the minutes.
6. Press **NEXT** (or **▶**).
7. Input a description of the appointment.
 - If you want to set a schedule alarm, press **NEXT** (or **▼**) after inputting the description. See "To set a schedule alarm when inputting data".
8. After inputting the data, press **SET** to store it into memory.

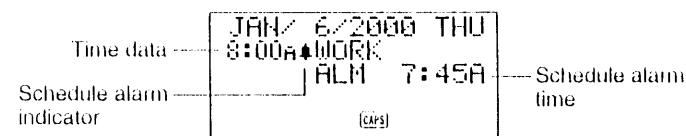
Using Schedule Alarms

You can set schedule alarms for Schedule Keeper data entries to help you keep on time for important appointments. Note the following important points when you are using a schedule alarm.

- The alarm indicator and time are automatically cleared after the alarm time is reached.
- Schedule alarms can only be set for Schedule Keeper data entries that include time data. If you set a schedule alarm for a Schedule Keeper entry with time data and then later clear the time data, the schedule alarm is also cleared automatically.

To set a schedule alarm when inputting data

1. Enter the Schedule Keeper and input data, using the procedures described in steps 1 through 7 under "To input Schedule Keeper data" on page 42.
2. After inputting the description, press **NEXT** (or **▼**).
 - You can press the **NEXT** (or **▼**) without inputting anything for the description.
3. Input the schedule alarm time. Use the **▶** and **◀** cursor keys to move between the hour and minutes setting.



- You can skip this input if you want the schedule alarm time to be the same as that for the schedule data time.
- Whenever the schedule alarm setting is shown on the display, pressing **DEL** clears the alarm time and displays the prompt "ALM TIME?" Input the alarm time using the same procedure described above.
- 4. After inputting the data, press **SET** to store it into memory.
- Note that the schedule alarm setting is cleared from the display when you press **SET**.
- If you attempt to set a schedule alarm time that is already passed, the message "ALARM TIME ALREADY PASSED!" appears on the display. Then the data is stored without a schedule alarm.

- If you attempt to set a schedule alarm time that is already set for another data entry, the message "ALARM TIME ALREADY USED!" appears on the display. Press ESC, ► or ◀ to display the schedule alarm to change it.

To set or change a schedule alarm for an existing data entry

- 1 Enter the Schedule Keeper and recall the data for which you want to set or change a schedule alarm. Press **FUNC** to display the function menu and then press 1 to select **ITEM EDIT**.
- 2 Press **NEXT** until the cursor moves to the Schedule Alarm time.
- 3 Input the schedule alarm time. Use the ◀ and ► cursor keys to move between the hour and minutes setting.
- Whenever the schedule alarm setting is shown on the display, pressing **DEL** clears the alarm time and displays the prompt "ALM TIME?". Input the alarm time using the same procedure described above.
- 4 After inputting the data, press **SET** to store it into memory.
- Note that the schedule alarm setting is cleared from the display when you press **SET**.

To view a data entry's current schedule alarm setting

- 1 Enter the Schedule Keeper and recall the date whose schedule alarm setting you want to view.
- 2 Press **NEXT** to switch the index display to show the schedule alarm settings for all entries stored under the date you are viewing.
- 3 Use ▲ and ▼ to scroll through the entries and view the alarm times.
- 4 To clear the schedule alarm times, press **NEXT** again.

To delete a specific schedule alarm

- 1 Enter the Schedule Keeper and recall the data for which you want to delete the schedule alarm. Press **FUNC** to display the function menu and then press 1 to select **ITEM EDIT**.
- 2 Press **NEXT** (or ▼) until the schedule alarm time appears.
- 3 Press **DEL** to delete the currently set schedule alarm time.
- 4 After deleting the alarm time, press **SET** to store the entry into memory.

Where to find other information

- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory" on page 59.
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting and Copying data" on page 62.

Using the Expense Mode

The Expense Mode lets you store expense data, including payment date, payment amount, payment method, expense type and description. You can also produce total for other period of time.

Before using the Expense Mode

When inputting data about the payment type and expense type in the Expense Mode, you can use preset labels to make input quicker and easier. This means that you should attach the text you want to the preset labels before actually using the Expense Mode. For details on how to do this, see "To edit labels" on page 48.

About Expense Mode data items and data entries...

Each Expense Mode data item is made up of the following five data entries.

Data Entry	Description
Date	Year Month Date
Amount	Numbers up to eight digits long can be input
Payment Type	9 payment types, including "AMEX," "Cash" and others are preset for you to choose from. These preset labels can be edited freely.
Expense Type	6 expense types, including "Meals," "Mileage," "Entertainment" and others are preset for you to choose from. These preset labels can be edited freely.
Description	Up to 331 Characters

- You can edit the 9 Payment Type and the 6 Expense Type labels using the procedures described on page 48.

About Expense Mode Display formats

As with the other modes, Expense Mode data can be displayed using an Index Display or a Data Display. The following describes the contents of each type of display.

Index Display

The Index Display shows data day-by-day.

```

FEB/19/2000 SAT
Miscel 100.50
Meals 150.00
(Cash)
  
```

- In the Index Display, only the first six characters of the name are shown.
- Up to three entries are shown, along with payment type or expense type.

Data Display

The Data Display shows all of the details for a specific entry.

```

FEB/19/2000 SAT
AMOUNT 100.50
AMEX
Miscellaneous
▼ (Cash)
  
```

- Press the DISP CHNG key to switch between the Index Display and Data Display.
- The Index Display is always selected automatically whenever you press EXP/REM to enter the Expense Mode.

To enter the Expense Mode

You can use either of the two following methods to enter the Expense Mode.

- Press EXP/REM. The Expense Mode screen for the current date (as noted on the Home Time display) appears*.
- Display the calendar, move the cursor to the date you want, and then press EXP/REM. The Expense Mode screen for the day you selected appears on the display.

*If you press EXP/REM while in the Schedule Keeper Mode, the Expense Mode screen for the date you were viewing in the Schedule Keeper Mode appears.

To edit labels

Use the following procedure to change the labels assigned to expense and payment types.

1. Press **EXP/REM** to enter the Expense Mode.
2. Press **FUNC** once to display the first function menu.

```

1 PERIOD TOTAL
2 AMOUNT TYPE
3 PAY TYPE EDIT
4 EXP TYPE EDIT
(CAP)
  
```

3. Press 3 if you want to edit payment type labels or 4 to edit expense type labels.

```

*PAYMENT TYPE*
AMEX
VISA
MasterCard
(CAP)
  
```

```

*EXPENSE TYPE*
Meals
Mileage
Entertainment
(CAP)
  
```

4. Use **▲** and **▼** to select the item whose label you want to change.
5. While the label you want to change is selected, input the text for the label to which you want to change.
 - Labels can be up to 14 characters long.
6. After you make all of the changes you want, press **SET** to store them in memory.
 - The new labels will be displayed when you next input new data.
 - If you try to store a label that is identical to one already in memory, the message "SAME TYPE ALREADY USED!" appears.

Note

- Using the above procedure to change a label does not change labels that are already assigned to expenses or payments. If you change a label from "Miscellaneous" to "Grocery," for example, entries that are already assigned the "Miscellaneous" are not changed.

To specify a date

Expense Mode data is stored along with its date, with the date being treated as a separate data entry. Use the following procedure to specify a date in the Expense Mode.

1. Press **SHIFT CLEAR**.
2. Input the year and press **TIME/DATE**.
3. Input the month and press **TIME/DATE**.
4. Input the date and press **TIME/DATE**. The Index Display that contains that date appears on the display.

To input Expense Mode data

1. Press **EXP/REM** to enter the Expense Mode, and input a date using the procedure described under "To specify a date."
2. Input the amount of the expense and press **NEXT**.
 - You can input an amount up to 99999999.
 - Two decimal places is the default for the expense amount. This means that an input of 123 is automatically stored as 123.00. If you input a value that is seven digits long, the default becomes one decimal digit. A value that is eight digits long has no decimal digits.
3. The list of payment type labels takes up three screens. Use **▲** and **▼** to switch between screens. While a screen is displayed, use number keys 1 through 9 to select the payment type label you want. If you want to skip this entry without inputting anything, press **NEXT** to move on to the next entry and leave the payment type blank.

```

*PAYMENT TYPE*
1 AMEX
2 VISA
3 MasterCard
▼ (CAP)
  
```

4. The list of expense type labels takes up two screens. Use **▲** and **▼** to switch between screens. While a screen is displayed, use number keys 1 through 6 to select the expense type label you want. If you want to skip this entry without inputting anything, press **NEXT** to move on to the next entry and leave the expense type blank.

```

*EXPENSE TYPE*
1 Meals
2 Mileage
3 Entertainment
▼
(CAP)

```

5. Input a description of the expense, along with any other comments you want to include.
6. After you finish inputting data, you can use the ▲ and ▼ keys to scroll through the data entries and make any changes that you want.

```

*EXPENSE TYPE*
4 MISCELANEOUS
5 FREE A
6 FREE B
▲
(CAP)

```

- Whenever you return to the expense type or payment type item, the currently selected label is highlighted on the display.
7. Press SET to store the data item in memory.

To change the amount type

Use the following procedure to specify whether the payment or expense type should appear on the Index Display.

1. Press EXP/REM to enter the Expense Mode.
2. Press FUNC once to display the first function menu, and then press 2 to select AMOUNT TYPE.

```

**AMOUNT TYPE**
1 PAYMENT
2 EXPENSE
(CAP)

```

3. Press 1 to select PAYMENT or 2 to select EXPENSE. As soon as you make a selection, the function menu is cleared from the display.

```

FEB/19/2000 SAT
AMEX 100.50
VISA 150.00
(CAP)

```

```

FEB/19/2000 SAT
Miscel 100.50
Meals 150.00
(CAP)

```

To calculate expense totals for a specific period

Use the following procedure to calculate totals (subtotals for each type and grand total) for data in the Expense Mode.

1. Press EXP/REM to enter the Expense Mode, and input a date using the procedure described under "To specify a date."
- The date you input here is the starting date of the period.
2. Press FUNC to display the function menu, and then 1 to select PERIOD TOTAL.

This tells the calculator that you will calculate the total during a period starting from the date you input in step 1, up to another date (which you will specify in the next step).

```

PERIOD TOTAL
2000/ 2/19 SAT~
2000/ 2/19
TO YEAR?
(CAP)

```

3. Input the ending date using the following input sequence:
Year TIME/DATE Month TIME/DATE Date TIME/DATE

```

PERIOD TOTAL
2000/ 2/19 SAT~
2000/ 2/21
TO DATE?
(CAP)

```

- You can change the starting date, but you must do so before you press the TIME/DATE key at the end of the ending date input sequence above. To do so, use ◀ and ▶ to move the cursor to the starting date and make the changes you want.
- When you press the TIME/DATE key at the end of the ending date input sequence in step 3, a screen appears to let you specify the subtotal type. Use ◀ and ▶ to select totalization by payment type or expense type (the currently selected type is highlighted on the display).

```

PERIOD TOTAL
SELECT TYPE
PAYMENT 1-2-3-4-5-6-7-8-9-0-
  
```

- Press SET to calculate totals for the period you specified in accordance with the conditions you specified.

```

FROM: 2000/ 2/19
TO : 2000/ 2/21
*TOTAL AMOUNT*
735.50
  
```

- This operation produces a total for each PAYMENT TYPE or EXPENSE TYPE, plus a grand total. This example here shows totalization according to EXPENSE TYPE.

```

Meals 180.00
Miscellaneous 100.50
  
```

- If all of the data cannot fit on the display, use ▼ and ▲ to scroll two lines at a time.

```

FREE A 5.00
Entertainment 430.00
  
```

- Press SHIFT and then ▲ or ▼ to scroll data one screen (two items) at a time.

```

Entertainment 430.00
-Other- 20.00
  
```

- Items for which the PAYMENT TYPE/EXPENSE TYPE is not specified (because this specification was skipped during data input) are totalized under "-Other-".

- To return from this display to specification of the total format (step 4 above), press ESC. Now you can repeat steps 4 and 5 to calculate totals for the same period using different specifications.
- To return to the normal Expense Mode screen, press ESC twice.

About the total amount display

The amount for each type subtotal and the grand total can be an amount with an integer up to 10 digits long, plus a two-digit decimal part. This means that the maximum value is 9,999,999,999.99. Any value greater than this is displayed as "AMT TOO LONG".

Where to find other information

- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory" on page 59.
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting, and Copying data" on page 62.

Using the To Do Mode

The To Do Mode gives you a handy list of things to do. You can input To Do data by adding new items to end of those already in memory, or you can insert new items data between two existing items. Each To Do Mode item can contain up to 384 characters (including newline symbols).

To input To Do Mode data

1. Enter the To Do Mode.
2. Press **CLEAR**.
3. Input the text you want in the To Do list.
 - A check box is automatically inserted at the beginning of the To Do item. After you finish the task described in the To Do list, you can check it or delete it.
4. After inputting data, press **SET** to store it.

About the To Do list

Items in the To Do list are not sorted. They are displayed in the same sequence as they are input.

There are two types of items: *unchecked items* and *checked items*. Unchecked items come first in the To Do list, and they always start with a blank box. Checked items are at the bottom of the To Do list, and they start with a box that has a check mark inside.

```

0 TELEPHONE CALL
00 NEGOTIATION WI
0 BUDGET CALCULA
0 MEETING WITH M
(CAPS)
  
```

To insert a new To Do item between two existing items

1. Enter the To Do Mode.
2. Use the search procedures described under "Recalling data stored in memory" on page 59 to find the item you want to come after the new item you are about to input.
3. Using the procedure described under "To locate data using index search", move the name of the item you want to come after the new item into the top line of the Index Display.

4. Input the new To Do Mode data.
5. Press **SHIFT** followed by **SET** to store the new item above the item you selected in step 3.
 - If you press **SET** without pressing **SHIFT**, the new item is automatically stored at the end of the unchecked To Do list items already in memory. The **SHIFT** key tells the SF Unit to store the new item above the item you selected in step 3.

To check and uncheck To Do items

1. Enter the To Do Mode.
2. Use the search procedures described under "Recalling data stored in memory" on page 59 to find the item you want to check or uncheck.
3. Using the procedure described under "To locate data using index search", move the item you want to check or uncheck into the top line of the Index Display.
4. Press **FUNC** twice to display the second function menu, and then press **3** to select **ITEM CHECK**.

```

1 TO SECRET AREA
2 ALL DELETE
3 ITEM CHECK
4 DATA COMM.
(CAPS)
  
```

```

1 CHECK
2 CHECK&DATE
3 DATE&TIME
0 CHECK ERASE
(CAPS)
  
```

5. A submenu appears to give you a number of options to choose from. Input a number to select the option you want.

1 CHECK

This option inserts a check mark into the box at the beginning of the item you selected in step 3, and moves it to the bottom of the To Do list.

2 CHECK & DATE

This option inserts a check mark into the box at the beginning of the item you selected in step 3, and moves it to the bottom of the To Do list. It also lets you mark the item with the current date.

3 DATE & TIME

This option inserts a check mark into the box at the beginning of the item you selected in step 3, and moves it to the bottom of the To Do list. It also marks the item with the date and time it was checked.

4 CHECK ERASE

This option is available when the item you selected in step 3 is already checked, and selecting it unchecks the item. The unchecked item is then moved to the bottom of the list of any other unchecked items.

Using the Reminder Mode

The Reminder Mode helps you keep track of events that occur once a year, once a month, or once a day. You can input a reminder message which appears on the display at preset times. Each reminder can contain up to 384 characters, including newline symbols.

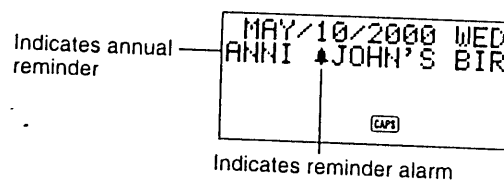
About Reminder Mode data...

Once you set a reminder, the text that you register along with it appears on the corresponding date in the Schedule Keeper. You can also set reminder alarms that sound at specific times on the corresponding dates to make doubly sure that you don't forget.

There are three types of reminders.

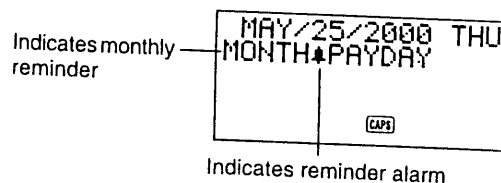
Annual reminder

This type of reminder appears in the Schedule Keeper on the same date every year.



Monthly reminder

This type of reminder appears in the Schedule Keeper on the same date each month.



Daily reminder

This type of reminder does not appear in the Schedule Keeper, but sounds an alarm and displays its messages daily.

Inputting reminder data

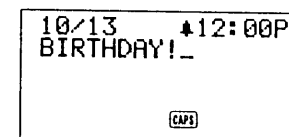
You can use the same procedure to input annual, monthly, and daily events. The type of Reminder data is determined by the date information that you input.

Reminder Type	Month	Date
Annual	Input month	Input date
Monthly	Input: "--"	Input date
Daily	Input: "--"	Input: "--"

To input reminder data

Example: To input the message "BIRTHDAY!" as an annual reminder message for October 13.

1. Enter the Reminder Mode. At this time, you could press **CLEAR** to clear the initial Reminder mode screen and change to the month input screen.
2. Input 10 as the month for the annual reminder.
 - In the case of a monthly or daily reminder, you would input -- for the month.
3. Press **▶**.
4. Input 13 as the date of the reminder.
 - In the case of a daily reminder, you would input -- for the date.
5. Press **▼** (or **NEXT**).
 - If you want to set a Reminder Alarm, you should press **▶** in place of **▼** (or **NEXT**). See "To set a Reminder Alarm when inputting data" for details on setting a Reminder Alarm.
6. Input the reminder message (such as "BIRTHDAY!").



7. After inputting the data, press **SET** to store it into memory.

About Reminder Alarms...

You can set reminder alarms that sound at preset times on the dates you specify in a reminder.

To set a Reminder Alarm when inputting data

1. Enter the Reminder Mode and input the month and date data you want.
2. After inputting the date, press **▶**.
3. Input the reminder alarm time. Input the hour, press **▶**, and then input the minutes. Use the **▶** and **◀** cursor keys to move between the hour and minutes setting.
4. Press **▼** and then input a reminder message.
5. After inputting the data, press **SET** to store it into memory.

To switch Reminder Alarms on and off

1. Press **FUNC** once to display the first function menu.
2. Press **4** to select the **SOUND** menu item.
3. Use **▲** and **▼** to select **REMINDER**.
4. Use **◀** and **▶** to switch the reminder alarms on and off.
5. Press **SET** to store your setting and clear the **SOUND** menu.

Where to find other information

- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory" on page 59.
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting and Copying data" on page 62.

Recalling data stored in memory

The following search capability lets you recall data stored in memory quickly and easily.

- With index search, you scroll through an index display of data items.
- With initial character search, you specify the data item you are looking for by inputting the first few letters of an entry.
- With mode search, you specify the data item you are looking for by inputting characters that might occur anywhere in any one of its entries.

Each of the above search procedures produces an index display of the found data items. You can then use **DISP CHNG** to switch to the full data display of the data item you want.

Note

You cannot perform mode search or initial character search in the Expense Mode.

To locate data using index search

1. Enter the mode you want to search.
2. Press **▲** or **▼** to scroll through the index display. You can also scroll to the next page of items by pressing **SHIFT ▲** or **SHIFT ▼**.
 - In the Telephone Directory, Memo Mode, To Do and Reminder Mode, pressing **▼** when the initial screen of the mode is displayed starts the index display from the first data item, while pressing **▲** starts from the last data item.
3. When the data item you are looking for is in the top of the display (the line immediately below the date in the Schedule Keeper Mode and Expense Mode), press **DISP CHNG** to switch to the full data display.

To locate data using Initial character search

1. Enter the mode you want to search.
2. Enter the first few characters of the entry for the data item you want to look for.
 - You can input one or more characters.
 - In the Reminder Mode, you can input a date for the search instead of text. See the notes following this procedure for details.
 - In the Schedule Keeper Mode, you can input a time for the search instead of text. See the notes following this procedure for details.

3. Press **SEARCH** to start the search. An index display of all data items in the mode whose initial characters match those that you specified appears on the display.

```

5/10  *12:00P
JOHN'S BIRTHDAY
12/10
JACK'S BIRTHDAY
[CAPS] [SEARCH]

```

Indicates this index display
is result of a search operation.

- To clear the "SEARCH" indicator from the display (and cancel the current search operation), press either **ESC** or **SEARCH**. The search operation is also canceled when you change modes, or by any data edit or input operation.
- If no data item matches your specification, the message "NOT FOUND!" appears on the display.
- If there is no data stored in memory, the message "NO DATA!" appears on the display.
- When one of the above error messages appears, you can press **ESC**, **◀**, or **▶** to display your original specification. Make any necessary changes and try again. If you don't want to try again, press **CLEAR** to clear the error message.
- Scroll through the index display item-by-item using **▲** and **▼**. You can also scroll to the next page of items by pressing **SHIFT ▲** or **SHIFT ▼**.
- When the entry of the data item you are looking for is in the top line (second line in the Schedule Keeper Mode) of the display, press **DISP CHNG** to switch to the full data display.

Notes

Note the following when searching for a date in the Reminder Mode.

- When searching for an annual reminder, be sure to input both the month and date. To search for an annual reminder for October 5, input **1 0 TIME/DATE 5**.
- When searching for a monthly reminder, be sure to input — for the month.
- When searching for a daily reminder, input — for both the month and the date.

Note the following when searching for a time in the Schedule Keeper Mode.

- To search for a starting time of 10:30 AM for example, input: **1 0 ▶ 3 0**. This will recall all appointments that start at 10:30 AM.
- To search for an item using both a starting time and ending time, such as 10:30 AM to 11:30 AM, input: **1 0 ▶ 3 0 ▶ 1 1 ▶ 3 0**. This will recall all appointments that start at 10:30 AM and end at 11:30 AM.
- Note that you cannot search for an item using the ending time only.
- When you search the Schedule Keeper Mode for text data, matching Reminder Mode annual and monthly reminders are also recalled.

To locate data using mode search

Use the same procedures as described under "To locate data using initial character search," but press **SHIFT SEARCH** to start the search. Note that mode search, however, recalls all data items in the mode that contain the characters you specify anywhere within their data (no just as the initial characters).

Notes

- The following shows how data is recalled by a mode search in the Schedule Keeper Mode when you specify a time as the search data.

Data Stored in Memory:

10:00 AM	10:30 AM — 12:00 PM
10:00 AM — 11:00 AM	11:00 AM
10:30 AM	

Mode Search Specification (specific time): 10:30 AM

Items found:

10:00 AM — 11:00 AM
10:30 AM
10:30 AM — 12:00 PM

Mode Search Specification (time range): 10:00 AM — 11:00 AM

Items found:

10:00 AM
10:00 AM — 11:00 AM
10:30 AM
10:30 AM — 12:00 PM

Editing, Deleting and Copying data

To edit a data item

1. Enter the mode you want to edit a data item.
2. Use index search, initial character search, or mode search to find the data item you want to edit.
3. Move the entry of the data item you want to edit into the top line (second line in the Schedule Keeper Mode and the Expense Mode) of the index display.
 • At this point, you may want to switch to the full data display by pressing **DISP CHNG**. The following steps are the same regardless of whether you are continuing from the index display or the data display.
4. Press **FUNC**.
 • In the Expense Mode, you should press **FUNC** twice.
5. Press 1 to select **ITEM EDIT**.
 • To clear the function menu without selecting anything, press **ESC**.
6. Make any changes you want.
 • To cancel the editing operation without making any changes, press **ESC** or **CLEAR**.
7. After making the changes you want, press **SET** to store the data item with its new changes.

To delete a single data item

1. Enter the mode you want to delete a data item.
2. Use index search, initial character search, or mode search to find the data item you want to delete.
3. Move the entry of the data item you want to delete into the top line (second line in the Schedule Keeper Mode and the Expense Mode) of the index display.
4. Press **FUNC**.
 • In the Expense Mode, you should press **FUNC** twice.
5. Press 2 to select **ITEM DELETE**.
 • To clear the function menu without deleting anything, press **ESC**.
6. Press **SET** to clear the data item you selected or **ESC** to abort the operation without deleting anything.
 • Remember that the delete operation cannot be undone.

To delete all data items in a mode

Important!

Use the following procedure to delete all data items in the Telephone Directory, Memo Mode, To Do Mode and Reminder Mode. To delete multiple data items in the Schedule Keeper Mode and Expense Mode, see the procedure under "To delete multiple data items in the Schedule Keeper Mode or Expense Mode."

1. Enter the mode where you want to delete all data items.
2. Press **FUNC** twice to display the second function menu.
3. Press 2 to select **ALL DELETE**.
 • To clear the function menu without deleting anything, press **ESC**.
4. Press **SET** to delete all data items in the current mode or **ESC** to abort the operation without deleting anything.
 • Remember that the delete operation cannot be undone.

To delete multiple data items in the Schedule Keeper Mode or Expense Mode

1. Enter the Schedule Keeper Mode or Expense Mode.
2. Press **FUNC** twice to display the second function menu.
 • In the Expense Mode, you should press **FUNC** three times.
3. Press 2 to select **ALL DELETE**.
 • To clear the function menu without deleting anything, press **ESC**.

```

ITEM DELETE
1901/ 1/ 1 TUE~
1998/ 1/31
TO YEAR?
(CAPS)
  
```

- You can use the ◀ and ▶ keys to move the cursor between the starting date and ending date and change the days, months, and years.
4. Input the year up to which you want to delete Schedule Keeper or Expense Mode data and press **TIME/DATE**.
 5. Input the month and press **TIME/DATE**.
 6. Input the date and press **TIME/DATE**.
 7. Press **SET** to delete all Schedule Keeper or Expense Mode data items during the period that you specified above, or **ESC** to abort the operation without deleting anything.
- Note that the above operation does not affect Reminder Mode annual and monthly reminders that appear in the Schedule Keeper Mode displays.
 - Remember that the delete operation cannot be undone.

To move a Schedule Keeper data to a different date

1. Enter the Schedule Keeper.
2. Use index search, initial character search, or mode search to find the data entry that contains the data you want to move.
 - You cannot use this procedure to edit Reminder Mode data.
3. Move the data you want to edit into the second line of the index display.
4. Press **FUNC** twice to display the second function menu.
5. Press **3** to select **DATE CHANGE**.
 - To clear the function menu without selecting anything, press **ESC**.
6. Input the year of the date and press **TIME/DATE**.
7. Input the month of the date and press **TIME/DATE**.
8. Input the date and press **TIME/DATE** to move the data and return to the Schedule Keeper, with the display showing the date you specified.
9. After making any changes you want in the data, press **SET** to store the data entry.

To move an Expense Mode data item to a different date

Use the following procedure to change the date entry of an existing Expense Mode data item.

1. Enter the Expense Mode.
2. Recall the data item whose date entry you want to change.
3. Press **FUNC** three times to display the third function menu.
4. Press **3** to select **DATE CHANGE**.
5. Input a new date using the following operation sequence:
Year **TIME/DATE** Month **TIME/DATE** Date **TIME/DATE**

```

FEB/21/2000 MON
20.00
┌
└
(E)
  
```

- For full details on inputting dates, see "To specify a date" on page 49.

6. After inputting the date, press **SET** to store the data in memory.

```

FEB/21/2000 MON
AMOUNT 20.00
(E)
  
```

- To abort this operation without changing anything, press **ESC** instead of **SET**.

Note

- When you press **TIME/DATE** after inputting the date in step 5 of the above procedure, the unit enters the data editing mode. At this time you can use the **▲** and **▼** keys to move the cursor around the data item and make changes in other entries if you want.

To copy a data item

The Copy Function lets you duplicate selected data. This function helps to cut down input time when you have multiple data items with similar data. You simply copy the original and then make any necessary changes to create a new data item.

1. Enter the mode you want to copy a data item.
2. Search for and display the data you want to copy.
3. Press **FUNC**.
 - In the Expense Mode, you should press **FUNC** twice.
4. Press **3** to select **ITEM COPY**.
 - At this time, the copy of the data you selected in step 2 above appears, along with the cursor.
 - If you are copying Schedule Keeper or Expense Mode data, the following screen appears at this point to ask you to specify the date where the data should be copied to.

```

ITEM COPY
TO YEAR?
2000/ 4/ 7
(E)
  
```

5. Input the year, month, and date, following each entry by pressing **TIME/DATE**.
6. Make any changes you want.
6. After you are finished making changes, press **SET** to store the new data in memory.

Using the Secret function

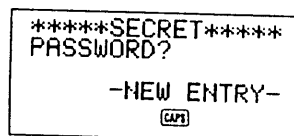
The Secret Function ensures that your personal data is kept private, but providing you with the means to restrict access to those who know your secret password. You can store Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode and Reminder Mode data in the secret memory area.

Important!

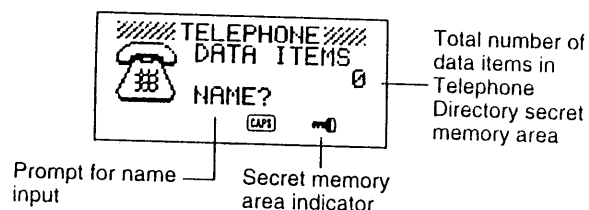
Once you register a password, there is no way delete it without performing the RESET operation described on page 19. If you forget your password, you will not be able to recall data stored in the secret memory area, and you also will not be able to use the Secret Function unless you perform the RESET operation. Be sure that you do not forget your password!

To create a secret memory area

1. Enter the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode or Reminder Mode.
2. Press  to display the password input screen.



3. Enter the word you want to use as your secret password.
 - You can use up to 48 letters, numbers and symbols in a password.
 4. Press  again to store the password.
- The following shows an example display for the Telephone Directory.



5. While in the secret memory area, you can change modes, input data, edit data, recall data, and delete data using the procedures explained under each mode in this manual.
6. To exit the secret memory area (and return to the open memory area), press .
 - At this time, the "" indicator disappears from the display.

To enter an existing secret memory area

1. Enter the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode or Reminder Mode.
2. Press  to display the password input screen.

*****SECRET*****
PASSWORD?

CAPS

3. Enter the password.
4. Press  again to enter the secret memory area for the mode you selected in step 1 above.
 - If the password you enter in step 3 does not match the one that is registered, the message "PASSWORD MISMATCH!" appears.

To edit an existing password

1. While in the secret memory area, press CLEAR, followed by  to display the currently registered password.
2. Press FUNC once to display the first function menu.
3. Press 1 to select PASSWORD EDIT.
 - The password reappears on the display with the cursor. Make any changes in the password you want.
4. After editing the password, press  to store it.

To transfer data from the open memory area to the secret memory area

1. While not in the secret memory area, enter the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode, or Reminder Mode.
2. Search for and display the data you want to move.
3. Press **FUNC** twice to display the second function menu.
 - In the Expense Mode, you should press **FUNC** three times.
4. Press 1 to select **TO SECRET AREA**.
 - At this time, a prompt appears on the display asking you for the password registered for the secret memory area.
5. Enter the password.
6. Press **OK**.
 - If the password you enter in step 5 does not match the one that is registered, the message "PASSWORD MISMATCH!" appears.
7. Press **SET** to transfer the selected data from the open memory area to the secret memory area, or **ESC** to abort the operation without transferring anything.
- When you transfer data to the secret memory area, it is automatically deleted from the open memory area.

To transfer data from the secret memory area to the open memory area

1. Enter the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode, or Reminder Mode.
2. Enter the secret memory area.
3. Search for and display the data you want to move.
4. Press **FUNC** twice to display the second function menu.
 - In the Expense Mode, you should press **FUNC** three times.
5. Press 1 to select **TO OPEN AREA**.
6. Press **SET** to transfer the selected data from the secret memory area to the open memory area, or **ESC** to abort the operation without transferring anything.
- When you transfer data to the open memory area, it is automatically deleted from the secret memory area.

Timekeeping Functions

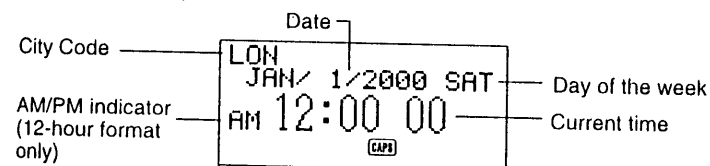
Using the Home Time function

The Home Time function shows you the current time and date in the time zone you preset as your Home Time zone. You also can set a daily alarm that sounds at the same time each day.

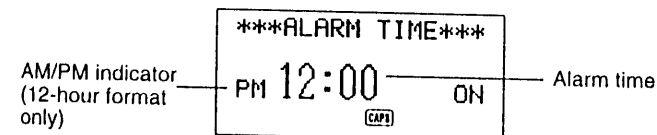
About Home Time displays...

There are two types of Home Time displays.

Home Time Display



Alarm Display



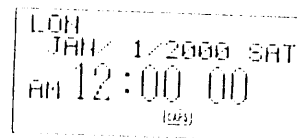
Use **DISP CHNG** to switch between the Home Time display and the Alarm display.

To display the Home Time

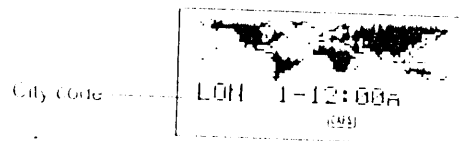
Press HOME/WORLD to display the current Home Time.

To set the Home Time zone

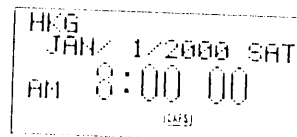
1. Press HOME/WORLD to display the current Home Time.



2. Press FUNC twice to display the function menu for the ZONE CHANGE operation.
3. Press 2 to select ZONE CHANGE.



- The current zone flashes on the World Map display. Its city code is also shown.
- You can edit city code names. See "To edit a city code name."
- 4. Use the ◀ and ▶ cursor keys to move the flashing time zone on the World Map. Note that the city code changes as you do.
- 5. When the time zone that you want for the Home Time is flashing (and the city code you want is shown on the display), press SET to register the new zone.



To set the Home Time

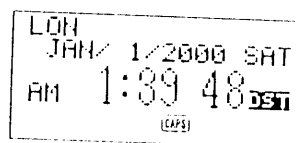
1. Display the current Home Time.
2. Press FUNC once to display the function menu for the HOME TIME SET operation.
3. Press 1 to select HOME TIME SET.
 - The current hour setting on the display flashes because it is *selected*.
4. Use the ◀ and ▶ cursor keys or TIME/DATE to move the flashing selection around the Home Time display. When any number is selected (flashing), you can change it by entering a new value.
 - You can change the Home Time setting even if summer time (DST) is selected.
 - Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
 - If you are using 12-hour time format, press A to specify AM or P to specify PM while the hour or minutes are flashing on the display.
 - All illegal input (26 for the hour, 65 for the minutes) is ignored.
 - Years can be input within the range of 1901 through 2099.
 - An input value from 1 to 49 for the year is automatically converted to the corresponding 21st century year (2001 to 2049). A value from 50 to 99 is converted to the corresponding 20th century year (1950 to 1999).
5. After you set the time and date, press SET to store them.
 - The seconds count of the timepiece resets to "00" when you press SET.

To switch the Home Time between 12-hour and 24-hour format

1. Display the current Home Time.
2. Press FUNC once to display the first function menu.
3. Press 2 to select 12/24 HOURS.
 - The 12-hour/24-hour setting is set up as a *toggle* setting. This means that each time you select the 12/24 HOURS item in the function menu, the Home Time display switches from its present setting to the opposite one.
 - The 12-hour/24-hour setting you make is applied for the time displays in the Schedule Keeper, Reminder Mode, Home Time and World Time display.

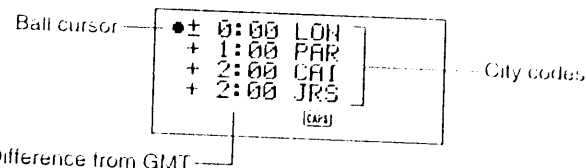
To switch the Home Time between standard and daylight saving time

1. Display the current Home Time.
2. Press **FUNC** once to display the first function menu.
3. Press **3** to select **DST ON/OFF**.
 - The standard/DST setting is set up as a *toggle* setting. This means that each time you select the **DST ON/OFF** item in the function menu, the Home Time display switches from its present setting to the opposite one.
 - The following shows an example display with the **DST** indicator (which indicates that **DST** is on).



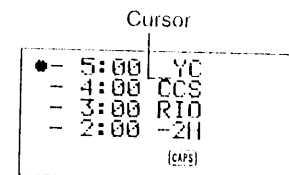
To edit a city code name

1. Display the Home Time.
- You can also edit a city code name starting from the Home Time display.
2. Press **FUNC** twice to display the second function menu.
3. Press **3** to select **ZONE NAME EDIT**.



4. Use the **▲** and **▼** cursor keys to move the ball cursor up and down until it is located to the left of the time zone whose city code you want to edit.
 - Holding down either key moves the ball cursor at high speed.
 - The display starts to scroll automatically whenever the ball cursor reaches the top or the bottom of the display.

5. Press the **▶** cursor key, and a cursor appears in the city code of the time zone at which the ball cursor is located.



6. Make any changes you want in the city code where the cursor is located.
7. After editing a city code, press **SET** to store it in memory.

To set the Daily Alarm

1. Display the current Home Time.
2. Press **DISP CHNG** to display the current daily alarm setting.
3. Press **FUNC** once to display the first function menu.
4. Press **1** to select **ALARM TIME SET**.
 - The alarm's hour setting on the display flashes because it is *selected*.
5. Use the **◀** and **▶** cursor keys or **TIME/DATE** to move the flashing selection between the hour and the minutes setting. When either value is selected (flashing), you can change it by entering a new value.
 - Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
 - If you are using 12 hour time format, press **A** to specify AM or **P** to specify PM.
 - All illegal input (26 for the hour, 65 for the minutes) is ignored.
6. After you set the alarm time, press **SET** to store it.
- For details on how to switch the Daily Alarm off, see "To switch the key input and alarm tones on and off" on page 25.

About the daily alarm...

Once you set the daily alarm, it sounds at the same time every day (as long as the **DAILY AL** setting is **ON**).

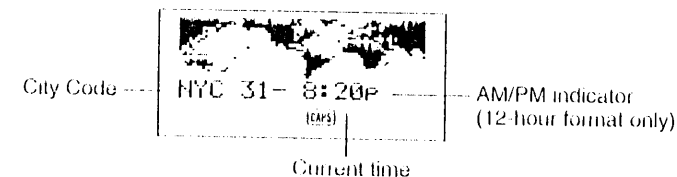
To select the date format

1. Display the current Home Time.
 2. Press **FUNC** twice to display the second function menu.
 3. Press **4** to select **DATE FORMAT**.
 4. Select a format by entering its number.
- The following shows an example of each format

1 M/D/Y: JAN/1/2000 SAT
 2 D/M/Y: 1/JAN/2000 SAT
 3 Y/M/D: 2000/1/1 SAT

Using the World Time function

With the World Time function, you can view the current time in any one of 29 time zones around the world. The times and dates that appear in the World Time displays are based on the current Home Time setting.

**To display the World Time**

While the Home Time is shown, press **HOME/WORLD** to display the World Time.

- The time zone that you last selected when displaying the World Time appears on the display.

To set the World Time zone

Enter the World Time Mode and perform the same procedure as that described under "To set the Home Time zone" on page 70.

To switch a World Time zone between standard and daylight saving time

Select the World Time zone that you want to set summer time for, and then perform the same procedure as that described under "To switch the Home Time between standard and daylight saving time" on page 72.

To edit a city code name

Enter the World Time Mode and perform the same procedure as that described under "To edit a city code name" on page 72.

PART 4 Timekeeping Functions

City Code List

City Code	City Name	Time Difference	Other Cities in Zone
-11	(GMT - 11)	- 11	Midway
HNL	Honolulu	- 10	
ANC	Anchorage	- 09	
LAX	Los Angeles	- 08	San Francisco, Seattle, Las Vegas
DEN	Denver	- 07	El Paso
CHI	Chicago	- 06	Dallas, Mexico City, Houston
NYC	New York	- 05	Washington D.C., Boston, Montreal
CCS	Caracas	- 04	Santiago
RIO	Rio de Janeiro	- 03	Sao Paulo, Buenos Aires
-2H	(GMT - 2)	- 02	
-1H	(GMT - 1)	- 01	Azores
LON	London	± 00	Greenwich Mean Time
PAR	Paris	+ 01	Rome, Madrid, Amsterdam, Berlin
CAI	Cairo	+ 02	Athens, Helsinki, Beirut
JRS	Jerusalem	+ 02	
JED	Jeddah	+ 03	Kuwait, Harar
THR	Tehran	+ 03:30	Shiraz
DXB	Dubai	+ 04	Abu Dhabi
PBL	Kabul	+ 04:30	
KHI	Karachi	+ 05	
DEL	Delhi	+ 05:30	Calcutta, Mumbai
DAC	Dhaka	+ 06	Colombo
RGH	Rangoon	+ 06:30	
BKK	Bangkok	+ 07	Jakarta, Hanoi
HKG	Hong Kong	+ 08	Beijing, Taipei, Singapore, Manila
TYO	Tokyo	+ 09	Seoul, Pyongyang
ADL	Adelaide	+ 09:30	Darwin
SYD	Sydney	+ 10	Guam
HOU	Honolulu	+ 11	Port Vila
WLG	Wellington	+ 12	Auckland

PART 5

Calculator Functions

Using the Calculator

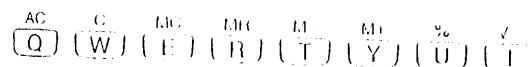
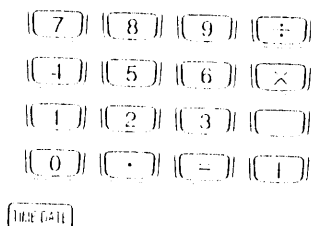
Whenever you enter the Calculator Mode, some of the keys on the SF Unit keyboard take on calculator functions.

To enter the Calculator Mode

Press **CAL/CONV** to enter the Calculator Mode.

About the Calculator Mode keys...

The following illustration shows the SF Unit keys that are used in the Calculator Mode.



- **AC** -- clears the calculator completely (except the calculator memory).
- Use **C** to clear a value if you have not yet entered the operator following that value
- **CLEAR** -- clears the calculator
- Use the number keys (0 through 9) to enter values. Press **.** to input a decimal point.

- Use MC, MR, M- and M+ for calculator memory operations.
 - MC — clears the calculator memory.
 - MR — recalls the current calculator memory contents.
 - M- — subtracts the currently displayed value from the current memory contents. You can also press M- to execute a calculation, with the result being subtracted from the memory contents.
 - M+ — adds the currently displayed value to the current memory contents. You can also press M+ to execute a calculation, with the result being added to the memory contents.
- Use +, -, × and ÷ to specify the arithmetic operation that is marked above each key.
- = — executes a calculation and displays its result.
- Use % for percentage calculations.
- Use √ for square root calculations.
- ► shifts the displayed value to the right, cutting off the rightmost digit.
- TIME/DATE — used for date calculation.

To perform calculations

	[AC]	0.
53 + 123 - 63 =	53[+]123[-]63[=]	113.
963 × (23 - 56) =	23[-]56[×]963[=]	31779.
(56 × 3 - 89) ÷ 5.2 + 63 =	56[×]3[-]89[÷]5.2[+]63[=]	78.19230769
123456 × 741852 =	123456[×]741852[=]	E 9.158608051
	[C]	9.158608051
√3 × 5 =	3[√][×]5[=]	8.660254035
12 ÷ 23 =	23[÷][+]12[=]	K 35.
45 ÷ 23 =	45[÷]	K 68.
78 ÷ 23 =	78[÷]	K 101.
7 - 5.6 =	5.6[-][+]7[=]	K 1.4
2 - 5.6 =	2[-]	K 3.6
2.3 × 12 =	12[×][×]2.3[=]	K 27.6
4.5 × 12 =	4.5[×]	K 54.
45 ÷ 9.6 =	9.6[÷][÷]45[=]	K 4.6875
78 ÷ 9.6 =	78[÷]	K 8.125
12% of 1500	1500[×]12[%]	180.
Percentage of 660 against 880	660[÷]880[%]	75.
15% add-on of 2500	2500[×]15[%][+]	2875.
25% discount of 3500	3500[×]25[%][-]	2625.
What will the selling price and profit be when the purchasing price of an item is \$480 and the profit rate to the selling price is 25%?	480[+]25[%]	640.
	[=]	160.
If you made \$80 last week and \$100 this week, what is the percent increase?	100[-]80[%]	25.
80 × 9 = 720	[MC]80[×]9[M+]	M 720.
50 × 6 = 300	50[×]6[M+]	M 300.
20 × 3 = 60	20[×]3[M+]	M 60.
180	[MC]	M 480.

To perform constant calculations

[MC]

3 [+][+] 2

[=]

[=]

1. Enter the Calculator Mode.
2. Enter the calculation, pressing the arithmetic operator key twice. This will cause the "K" indicator to appear on the display to indicate a constant calculation.
 - You can use this constant calculation technique for addition, subtraction, multiplication, and division.
3. Press = to display the initial result (in this case, 5).
4. Press = again to add 3 to the result (in this case, 5 + 3 = 8).
 - You can repeat the above operation as many times as you like. Each time you press =, the previous result obtained is added to, subtracted from, multiplied by, or divided by the value to the left of the arithmetic operator.
 - To clear a constant calculation, press AC.

To correct errors in calculations

If you enter a wrong value, press C and then enter the correct value.

If you press the wrong arithmetic operator key (+, -, ×, ÷), simply press the correct key before entering anything else.

About calculation errors...

Whenever an error occurs, the indicator "E" appears on the display.

E	0.
---	----

The following conditions all result in errors.

- When the number of digits in the mantissa of an intermediate or a final result exceeds 10 digits.

- When the number of digits in the mantissa of a value stored in memory exceeds 10 digits. In this case, the SF Unit automatically retains the last value stored that did not exceed 10 digits.
- Division by zero.

To clear errors

Press C to continue with the same calculation. If you want to clear the calculation and start again, press AC.

Performing date calculations

The SF Unit lets you perform calculations involving dates within the range of January 1, 1901 through December 31, 2099. If you try to use dates outside this range, the "E" indicator appears on the display to indicate an error. Note that you can use constant calculation techniques and calculation memory when performing date calculations.

To calculate the number of days between two dates

[MC]

 2000 [TIME/DATE] 7
 [TIME/DATE] 3

1. Enter the Calculator Mode.
2. Enter the later date, pressing TIME/DATE after the year and month entries.
- Here, we will calculate the number of days between December 5, 1999 and July 3, 2000.

2000/ 7/ 3

[-]

3. Press - for the subtraction operation.

- 1999 [TIME/DATE] 12
[TIME/DATE] 5
4. Enter the earlier date, pressing **TIME/DATE** after the year and month entries.

1999/12/ 5

- [=]
5. Press **=** to display the result.

211.

To calculate the date that is a specific number of days after another date

- [C] .
- 2010 [TIME/DATE] 12
[TIME/DATE] 20
- [+]
- 300
- [=]
1. Enter the Calculator Mode.
 2. Enter the date, pressing **TIME/DATE** after the year and month entries.
 - Here, we will calculate the date that comes 300 days from December 20, 2010.
 3. Press **+** for the addition operation.
 4. Enter the number of days.
 5. Press **=** to display the result.

SUN
2011/10/16

- Use subtraction instead of addition to calculate a date that is a specific number of days before a date.

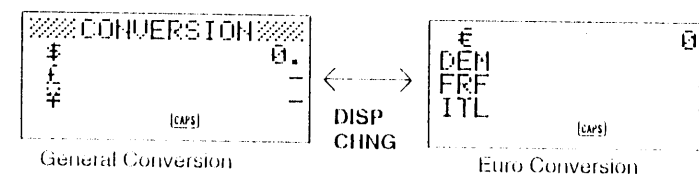
Using the General Conversion Mode

The General Conversion Mode lets you perform currency conversions between up to three national currencies. You can also define cross rates to perform conversions between different currency pairs.

To enter the General Conversion Mode

Press **CAL/CONV** twice to enter the Conversion Mode.

- Use **DISP CHNG** to change modes between the General Conversion Mode and Euro Conversion Mode.



To set an exchange rate

- Initially this mode is set up to convert between dollars (\$), pounds (£), and yen (¥).
- Be sure to set the correct rates before performing currency conversions.
- You can change currency names and specify the exchange rate to use for conversions.

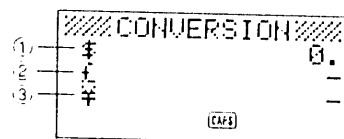
Example 1

Set the following conversion rates.

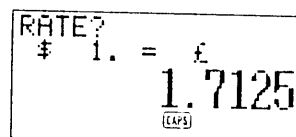
\$1 (1) = £1.7125 (2)

£1 (2) = ¥130 (3)

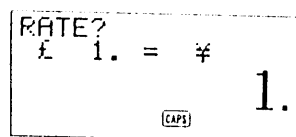
1. Enter the General Conversion Mode.



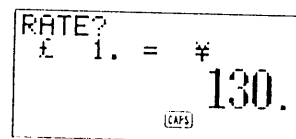
2. Use $\blacktriangle$ and $\blacktriangledown$ to move the cursor to (2) £ (pounds), and then press **FUNC**.
3. Press 1 to select **SETTINGS**.
4. Press **SET**.
5. Input the current exchange rate for the number of pounds (2) per dollar (1).



6. Press **SET**.



7. Input the current exchange rate for the number of yen (3) per pound (2).



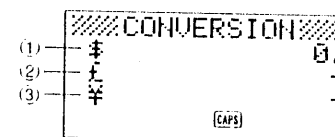
8. Press **SET**.

Example 2

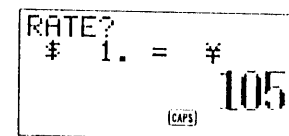
Add the following cross conversion rate to the rates you set in Example 1, above.

\$1 (1) = ¥105 (3)

9. Enter the General Conversion Mode.



10. Use $\blacktriangle$ and $\blacktriangledown$ to move the cursor to (3) ¥ (yen), and then press **FUNC**.
11. Press 1 to select **SETTINGS**.
12. Press **SET**.
13. Input the current exchange rate for the number of yen (3) per dollar (1).



14. Press **SET**.

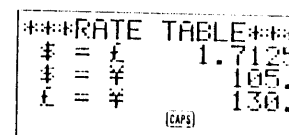
Note

- The interrelationship between rate (2) and rate (3) remains in accordance with the settings you made in step 7 of Example 1.

15. Press **SET**.

To view the current General Conversion Mode rates

1. Enter the General Conversion Mode
2. Press **FUNC**.
3. Press 2 to select **RATE TABLE**.



- Press **ESC** to return to the General Conversion Mode initial screen.

To perform a currency conversion**Example 1**

How many ② £ (pounds) and ③ ¥ (yen) are ① \$50 (dollars)?

1. Enter the General Conversion Mode.
2. Use ▲ and ▼ to move the cursor to ① \$ (dollar).
3. Enter 50.

```

  // CONVERSION //
  ① $ 50.-
  ② £ -
  ③ ¥ -
  (CAP)
  
```

4. Press SET or =.

```

  // CONVERSION //
  $ 50.-
  £ 85.63
  ¥ 5250.00
  (CAP)
  
```

Example 2

How many ① \$ (dollars) and ③ ¥ (yen) are ② £ 100 (pounds)?

1. Enter the General Conversion Mode.
2. Use ▲ and ▼ to move the cursor to ② £ (pounds).
3. Enter 100.

```

  // CONVERSION //
  ① $ -
  ② £ 100.-
  ③ ¥ -
  (CAP)
  
```

4. Press SET or =.

```

  // CONVERSION //
  $ 58.39
  £ 100.-
  ¥ 13000.00
  (CAP)
  
```

Notes

- Any decimal values produced by a calculation result are handled in accordance with the decimal value setting you make using the procedure under "To specify decimal value handling".
- Pressing an arithmetic key (+, −, ×, ÷) immediately after a conversion switches to the Calculator Mode with the conversion result part of the calculation.
Pressing CAL/CONV in the Conversion Mode immediately after performing a conversion clears the display to zero.
- Pressing CAL/CONV in the Calculator Mode changes to the Conversion Mode with the calculated result ready for conversion.

To change the currency name and rate**Example**

To specify an exchange rate of \$1 (dollar) = 1.1825 DEM

1. Enter the General Conversion Mode.
2. Use ▲ and ▼ to move the cursor to £ (pounds), and then press FUNC.
3. Press 1 to select SETTINGS.

```

  CURRENCY TYPE?
  £
  (CAP)
  
```

4. Input "DEM", and then press SET.

```

  RATE?
  $ 1. = DEM
  1.7125
  (CAP)
  
```

5. Enter 1.1825.

RATE?
\$ 1. = DEM
1.1825
(CAPS)

6. Press SET.

- This stores the input value into memory.
7. Input a rate for converting deutsche marks to yen.

RATE?
DEM 1. = ¥
130.
(CAPS)

8. Press SET.

To specify decimal value handling

- Enter the Conversion Mode.
- Use ▲ and ▼ to move the cursor to the currency whose decimal place setting you want to change, and then press FUNC.

1 SETTINGS
2 RATE TABLE
3 DECIMAL PLACES
4 SOUND
(CAPS)

3. Enter 3 to select DECIMAL PLACES.

DECIMAL PLACES
0
● 2
EXACT FIGURE
(CAPS)

- 0: Round off to an integer (no decimal places) (1.6253 → 2)
 - 2: Round off to two decimal places (1.6253 → 1.63)
 - EXACT FIGURE: No rounding
4. Use ▲ and ▼ to move the pointer to the decimal place option you want to select.
5. Press SET to apply your selection.

About conversion errors...

Whenever an error occurs, the indicator "E" appears on the display.

CONVERSION
\$ 9999999999
£ E1.999999999
¥ E2.999999999
(CAPS)

The following condition results in error.

- When the number of digits in the mantissa of an intermediate or a final result exceeds 10 digits.

To clear errors

Press AC, C, or CLEAR to clear the conversion errors.

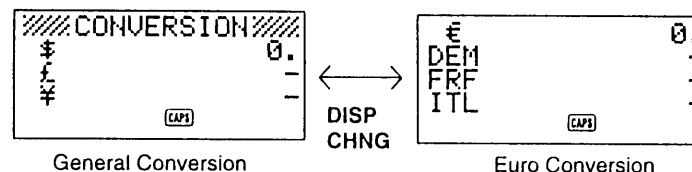
Using the Euro Conversion Mode

- This mode lets you convert between euros (€) and national currencies.
- You can select from any of 11 European currencies and their fixed exchange rates, or you can input your own national currency name and rate.

To enter the Euro Conversion Mode

Press CAL/CONV twice to enter the Conversion Mode.

- Use **DISP CHNG** to change modes between the General Conversion Mode and Euro Conversion Mode.



Example

To select the fixed exchange rate of 1€ (euro) = 166.386 ESP (peseta)

1. Enter the Euro Conversion Mode.
2. Use **▲** and **▼** to move the cursor to DEM, and then press **FUNC**.
3. Press 1 to select **SETTINGS**.

CURRENCY TYPE?
DEM
▼ 1.95583
CAPS

- Use **▲** and **▼** to scroll through the preprogrammed currencies and fixed exchange rates, and then choose "ESP" (See "Pre-programmed Currencies and Fixed Exchange Rates").

CURRENCY TYPE?
ESP
▲▼ 166.386
CAPS

4. Press **SET** twice.
- This registers the fixed exchange rate you recalled, so you can use it for currency conversion.

Pre-programmed Currencies and Fixed Exchange Rates

Country	Fixed Rate (per euro)	Decimal Places
Germany	1.95583 DEM (marks)	2
France	6.55957 FRF (francs)	2
Italy	1936.27 ITL (lira)	0
Spain	166.386 ESP (peseta)	0
Netherlands	2.20371 NLG (guilder)	2
Belgium	40.3399 BEF (franc)	0
Portugal	200.482 PTE (escudo)	0
Austria	13.7603 ATS (shilling)	2
Finland	5.94573 FIM (markka)	2
Ireland	0.787564 IEP (pound)	2
Luxembourg	40.3399 LUF (franc)	0

- The Decimal Places column of the above table shows the default setting for the number of decimal places for each currency. These settings can be changed to 0 (round off to integer), 2 (round off to two decimal places), or EXACT FIGURE (no rounding). See "To specify decimal value handling" on page 88.

To view the euro conversion rate table

1. Enter the Euro Conversion Mode.
2. Press **FUNC**.

SETTINGS
2 RATE TABLE
DECIMAL PLACES
4 SOUND
CAPS

- Press 2 to select RATE TABLE.

RATE TABLE	
€=DEM	1.95583
€=FRF	6.55957
€=ITL	1936.27

- Press ESC to return to the Euro Conversion Mode initial screen.

To perform the currency conversion

The following examples assume that the pre-programmed currencies DEM, FRF and ITL are already selected.

Example 1

How many ② DEM (marks), ③ FRF (francs) and ④ ITL (lira) are ① 50 € (euros)?

- Enter the Euro Conversion Mode.
- Use ▲ and ▼ to move the cursor to € (euros).

①	€	0.
②	DEM	-
③	FRF	-
④	ITL	-

- Input 50.
- Press SET or =.

€	50.
DEM	97.79
FRF	327.98
ITL	96814.

Example 2

How many ① € (euros), ③ FRF (franc) and ④ ITL (lira) are ② 100 DEM (marks)?

- Enter the Euro Conversion Mode.
- Use ▲ and ▼ to move the cursor to DEM.

①	€	-
②	DEM	0.
③	FRF	-
④	ITL	-

- Enter 100.
- Press SET or =.

€	51.13
DEM	100.
FRF	335.39
ITL	99000.

Notes

- Any decimal values produced by a calculation result are handled in accordance with the decimal value setting you make using the procedure under "To specify decimal value handling".
- Pressing an arithmetic key (+, -, ×, ÷) immediately after a conversion switches to the Calculator Mode with the conversion result part of the calculation.
Pressing CAL/CONV in the Conversion Mode immediately after performing a conversion clears the display to zero.
- Pressing CAL/CONV in the Calculator Mode changes to the Conversion Mode with the calculated result ready for conversion.

To change the currency name and rate

Example

To change the DEM name to US\$ and the rate to 1.7125.

- Enter the Euro Conversion Mode.
- Use ▲ and ▼ to move the cursor to DEM, and then press FUNC.
- Press 1 to select SETTINGS.

4. Type "US\$", and then press SET.

5. Input 1 . 7 1 2 5, and then press SET.

- This stores the input value into memory.

Notes

- You can input up to four characters for the currency name.
- You can input a rate within the range of 999999 to 0.0001. EU regulations stipulate six significant digits for the rate. For digits less than 1, the rate can have up to six digits starting with the first non-zero digit.

Example

0.123456, 0.0123456, 0.000123456

To specify decimal value handling

Refer to "To specify decimal value handling" on page 88.

About conversion errors...

Refer to "About conversion errors..." on page 89.

To clear errors

Press AC, C, or CLEAR to clear the conversion errors.

Data Communications

Data communications capabilities let you transfer data between two CASIO SF Units, between an SF Unit and a CASIO CSF Unit or NX Unit, or between this unit and a personal computer. You can perform such operations in the Telephone Directory, Memo, Schedule Keeper, Calendar, To Do, Expense or Reminder modes.

About data compatibility

Whenever you exchange data with a CASIO SF Unit, there are certain restrictions concerning data compatibility.

Send data

- You cannot send data to the CASIO SF-A Series Units (SF-A10, etc.).
- Some SF Units, CSF Units, NX Units do not have modes that are included with this Unit. For example, some Units do not have a Reminder Mode or an Expense Mode. Data from a mode cannot be received by an SF Unit, CSF Unit, NX Unit unless that SF Unit, CSF Unit, NX Unit also has the same mode.
- Data cannot be sent from this SF unit to a CASIO SF-5580, 5580E, 5590SY, 5590SYE, 5780, 5780E, 5790SY, 5790SYE, 5980, 5980E, 5990SY, 5990SYE, 6500SY, 6700SY, 6900SY, 7100SY or 7200SY unit.
- When data is sent from this SF Unit to a CASIO CSF or NX Unit, data stored in Telephone Directory items FREE1 through FREE6 is stored in the Telephone Directory MEMO item of the unit to which you are sending data, with newline symbols between the FREE items.
- When data is sent from this SF Unit to a CASIO CSF or NX Unit, all text is blue.
- When data is sent from this SF Unit to a CASIO CSF or NX Unit, all calendar highlighting is blue.
- The euro mark € can be transferred between two SF-4900ER/SF-4980ER/SF-4985ER units. Euro marks are replaced by blank spaces when data is transferred from a SF-4900ER/SF-4980ER/SF-4985ER unit to an older model.

Receive data

- You cannot receive data from the CASIO SF-A Series Units (SF-A10, etc.).
- Some SF Units, CSF Units, NX Units have modes that are not included with this unit. Data from such modes cannot be received by this unit.
- The Schedule Keeper of some SF Units is capable of storing multiple-date data items. Whenever you transfer such a data item to the your SF Unit, it is automatically converted to a single-date data item. The date used is the one that starts the original multiple-date data item.

- Some SF Unit models have a mark protection feature to protect against accidental erasure of data. This unit does not feature mark protection, and so such data is received by this unit disregarding the mark protection.
- Data cannot be sent to this SF Unit from a CASIO SF-5580, 5580E, 5590SY, 5590SYE, 5780, 5780E, 5790SY, 5790SYE, 5980, 5980E, 5990SY, 5990SYE, 6500SY, 6700SY, 6900SY, 7100SY or 7200SY unit.
- When data is sent to this SF Unit from a CASIO CSF or NX Unit, CSF/NX Telephone Directory MEMO item data is stored in the Telephone Directory FREE1 item of this SF Unit.
- When data is sent to this SF Unit from a CASIO CSF or NX Unit, all text becomes monochrome.
- When data is sent to this SF Unit from a CASIO CSF or NX Unit, all calendar highlighting becomes monochrome. All CSF/NX calendar dates that are orange or green are converted to highlighted dates.
- This unit cannot receive PERSONAL, FAMILY, TIMETABLE, or GOLF memo data from a CASIO NX Unit.

Setting Up for Data Communications

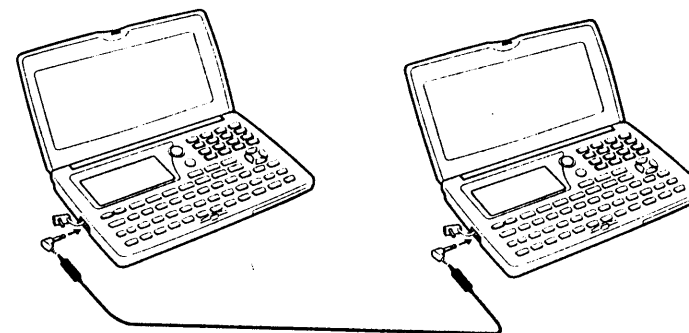
The following describes what you should do to set up for data communications between two SF Units, between an SF Unit and a CASIO CSF Unit or NX Unit, or between this unit and a personal computer.

To connect the SF-4900ER/SF-4980ER/SF-4985ER to another SF Unit (or CSF Unit/NX Unit)

1. Make sure that the power of both units is switched off.
 2. Open the covers of the data communication jacks of the two SF Units.
 3. Connect the two units using the optional SB-62 cable.
- The 3-pin plug of the SB-62 cable is a two-step type. When attaching the plug, be sure to push it firmly into the jacks as far as it will go.

Important!

- Be sure to close the connector covers of the SF Units when you are not performing data communications.



Performing data communications between an SF Unit and a personal computer

See the manual that comes with FA-127 Version 1.4 for details on connecting to a computer and setting up for communication.

Note

- The CASIO Data Communication Package may not be included with certain SF Units models. If your unit does not come with the Data Communication Package, contact your dealer about purchasing one. Please note that there are a number of different CASIO Data Communication Packages to suit various computers and SF Unit types. Because of this, you should note the following important points when purchasing a Data Communication Package. If you have any question about which package you need, consult with your dealer.
- Make sure the Data Communication Package is designed for use with your particular model of personal computer.
- If the proper Data Communication Package is not yet available in your area, consult with your dealer to find out when it is scheduled to go on sale.
- For information on how to connect the SF Unit with a personal computer, see the user's manual that comes with a Data Communication Package.

To set the SF Unit hardware parameters

1. Press **FUNC** twice to display the second function menu.
- You can perform the above operation in the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Calendar or Reminder.
- In the Expense Mode, you should press **FUNC** three times.
2. Press 4 to select **DATA COMM.**
3. Press 3 to select **SET UP PAR.**

```

**SET UP PAR.**
PARITY  E  0  12
BIT LENGTH  7  8
BPS      4800  9600
  
```

- The highlighted items on the display are the parameters that are currently set.
- The **PARITY** parameter is flashing because it is *selected*.
- 4. Use the **▲** and **▼** cursor keys to change the selected parameter on the display.
- 5. Use the **◀** and **▶** cursor keys to change the highlighted setting of the currently selected parameter.
- 6. When the parameters are set the way you want them, press **SET** to store them in memory.

About communications parameters...

Communications parameters make it possible for two communicating units to understand each other. The following explanations are provided for your information only. The only thing you need to remember is that the parameters of the send unit and the receive unit must be identical. Otherwise you will not be able to transfer data successfully.

PARITY

Parity is used for error detection during data exchanges. You can set the SF Unit parity as even (E), odd (O), or none (N).

BIT LENGTH

The bit length parameter states how many bits are to be used for each character. You can set the SF Unit bit length as 7 bits or 8 bits.

BPS

The letters "BPS" stand for "bits per second," and this setting represents the speed at which data is sent. The SF Unit lets you set a speed of either 4800 or 9600.

To set up the SF Unit to receive data

1. While an initial screen is displayed, press **FUNC** twice to display the second function menu.
- You can perform the above operation while the initial screen of the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Calendar or Reminder is displayed.
- In the Expense Mode, you should press **FUNC** three times.
- If you want the received data to be stored in the secret memory area, you should also enter the secret memory area at this point. If you are in the open memory area on the receiving unit, received data is stored into the open memory area.
2. Press 4 to select **DATA COMM.**
3. Press 2 to select **RECEIVE.**

```

←→ RECEIVE OK
DATA TO STOP
  → PRESS(ESC)
  (CAPS)
  
```

- This message indicates that the receive unit is standing by for data. Perform the required procedures to start sending data from another SF Unit, a CSF Unit, an NX Unit (see manual for details) or a personal computer (see the Interface Unit manual for details).
- To abort the receive operation at any time, press **ESC**.
- This procedure is the same regardless of whether the data is received from another SF Unit, a CSF Unit, an NX Unit or from a personal computer.
- 4. The display changes to the following once the SF Unit starts receiving data.

```

←→ RECEIVING
DATA ITEMS 16
  → TO STOP
  → PRESS(ESC)
  (CAPS)
  
```

— Receive data item count

- The number of data items received is counted on the display.
- If an error occurs during the receive operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
- Received data is added to the data already stored in memory. If the memory becomes full during the receive operation, the message "MEMORY FULL!" appears and data transfer stops. Press **ESC** to clear the error message.

- If an alarm (Daily Alarm, Schedule Alarm or Reminder Alarm) is reached while data is being received, the alarm does not sound until the data receive operation is complete.

Sending Data

This section tells you how to operate the SF Unit to send data to another SF Unit, a CSF Unit, an NX Unit or to a personal computer. There are a number of possible procedures you can use, depending on the mode and how many data items you want to send. Note that the following information is for the SF Unit only. Consult with your manuals for the correct operation of your other SF Unit, a CSF Unit, an NX Unit or personal computer.

About data transfer types...

There are a number of different ways you can transfer data.

- **One Data Item**

This transfer method lets you send a single Telephone Directory, Memo Mode, Reminder Mode, Schedule Keeper, To Do Mode or Expense Mode item from the SF Unit.

- **Mode Data Items**

This method is used to send all data items stored in the Telephone Directory, Memo Mode, To Do Mode, Calendar or Reminder Mode from the SF Unit. With the Schedule Keeper or Expense Mode, this procedure can be used to send all the data stored in a specific period (from one date to another). For the Calendar Mode, this procedure makes it possible to send all the highlight data in a specific period (from one month to another).

- **Month Data**

This method lets you send the highlight data for a specific month in the Calendar Mode.

- **All Data Items**

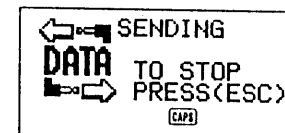
With this method, you can send all data items stored in the Telephone Directory, Memo Mode, Reminder Mode, Schedule Keeper, To Do Mode, Expense Mode and the Calendar from the SF Unit.

Note

- If an alarm (Daily Alarm, Schedule Alarm or Reminder Alarm) is reached while data is being sent, the alarm does not sound until the data send operation is complete.

To send all data items

1. While an initial screen is displayed, press **FUNC** twice to display the second function menu.
- You can perform the above operation while the initial screen of the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Calendar or Reminder is displayed.
- In the Expense Mode, you should press **FUNC** three times.
- Note that this operation sends all open memory area data or all secret memory area data. Make sure you are in the memory area you want (open or secret) before proceeding.
2. Press **4** to select **DATA COMM.**
3. Press **1** to select **SEND.**
4. Press **3** to select **ALL DATA.**
5. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.



- Data is sent in the sequence: Telephone Directory, Memo Mode, Reminder Mode, Schedule Keeper, Calendar, To Do Mode, Expense Mode.
- To abort the send operation at any time, press **ESC**.
- If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
- Some SF Units do not have modes that are included with this unit. For example, some units do not have a To Do Mode, Expense Mode, or Reminder Mode. Data from a mode cannot be received by an SF Unit unless that SF Unit also has the same mode. When sending data to a personal computer, certain mode data may be disregarded, depending upon the version of software you are using for SF data handling on the personal computer.
- 6. After the send operation is complete, the display returns to the screen of the mode you were in when you started this procedure.

To send one Telephone Directory, Memo Mode, To Do Mode, or Reminder Mode item

1. In the Telephone Directory, Memo Mode, To Do Mode, or Reminder Mode, press **FUNC** twice to display the second function menu.
 - You can perform the following operation while in the open memory area or the secret memory area.
2. Press **4** to select **DATA COMM.**
3. Press **1** to select **SEND.**
4. Press **1** to select **ONE ITEM.**
5. Press **▲** or **▼** to show an index display of items stored in memory.
 - Pressing **▼** starts the index display from the top of the data items, while pressing **▲** starts from the bottom.
 - You could also use initial character search or mode search to locate the data you want to send.
6. Use **▲** and **▼** to scroll through the index display until the item you want to send is located in the top line.
7. Press **DISP CHNG** to switch to the data display of the selected item.
8. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.
 - To abort the send operation at any time, press **ESC**.
 - If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
9. To interrupt a data transfer operation, press **ESC**.

To send one Schedule Keeper or Expense Mode entry

1. Enter the Schedule Keeper or Expense Mode.
2. If you are in the Schedule Keeper, press **FUNC** twice. In the Expense Mode, press **FUNC** three times.
 - You can perform the following operation while in the open memory area or the secret memory area.
3. Press **4** to select **DATA COMM.**
4. Press **1** to select **SEND.**
5. Press **1** to select **ONE ITEM.**
6. Use index search, initial character search, or mode search to find the Schedule Keeper item you want to send.
 - You cannot perform mode search or initial character search in the Expense Mode. You can use Index Search only.

7. Use **▲** and **▼** to move the entry you want to send into the second line of the display.
 - You cannot send Reminder Mode data listed under a Schedule Keeper date. Use the procedure on page 102 to send a single Reminder Mode data item.
8. Press **DISP CHNG** to switch to the data display of the selected entry.
9. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.
 - To abort the send operation at any time, press **ESC**.
 - If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
10. To interrupt a data transfer operation, press **ESC**.

To send one month of Calendar data (highlights)

1. In the Calendar Mode, press **FUNC** twice to display the second function menu.
2. Press **4** to select **DATA COMM.**
3. Press **1** to select **SEND.**
4. Press **1** to select **MONTH.**
5. Display the calendar whose highlights you want to send.
 - Use **▲** and **▼** to scroll through the calendar.
6. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.
 - If the corresponding calendar in the receiving unit already contains highlighted dates, the received data is ignored. You have to clear the corresponding data in the receiving unit before it can receive highlight data.
 - To abort the send operation at any time, press **ESC**.
 - If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
7. To interrupt a data transfer operation, press **ESC**.

To send all Telephone Directory, Memo Mode, To Do Mode, or Reminder Mode data

1. In the Telephone Directory, Memo Mode, To Do Mode, or Reminder Mode, press **FUNC** twice to display the second function menu.
 - You can perform the following operation while in the open memory area or the secret memory area.
2. Press **4** to select **DATA COMM.**
3. Press **1** to select **SEND.**
4. Press **2** to select **MODE DATA.**

5. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.
 - To abort the send operation at any time, press **ESC**.
 - If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
6. After the send operation is complete, the display returns to the initial screen of the mode you were in when you started this procedure.

To send all Schedule Keeper or Expense Mode data in a specific period

1. Select the Schedule Keeper or Expense Mode date that starts the period you want to send.
2. Press **FUNC** twice to display the second function menu.
 - In the Expense Mode, you should press **FUNC** three times.
 - You can perform the following operation while in the open memory area or the secret memory area.
3. Press 4 to select **DATA COMM.**
4. Press 1 to select **SEND.**
5. Press 2 to select **MODE DATA.**

```

MODE SEND
2000/1/6 THU
2000/1/6
TO YEAR?
  
```

--- Date selected in step 1 above

- At this time, both the start date and the end date for the period are the same as the date you selected in step 1.
6. Using the ◀ and ▶ keys to move the cursor, input the starting and ending date of the period.
 - To send the data from January 1, 2000 to April 1, 2000, for example, press ▶ to move the cursor under the month (2000/1/1) and press 4.
 7. After you specify the ending date, press **TIME/DATE.**
 8. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.
 - To abort the send operation at any time, press **ESC**.
 - This operation does not send Reminder Mode data listed under a Schedule Keeper date. Use the procedure on page 103 to send all Reminder Mode data item.

- If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
9. After the send operation is complete, the display returns to the Schedule Keeper or Expense Mode screen.

To send all Calendar data in a specific period

1. Select the calendar month that starts the period you want to send.
2. Press **FUNC** twice to display the second function menu.
3. Press 4 to select **DATA COMM.**
4. Press 1 to select **SEND.**
5. Press 2 to select **MODE DATA.**

```

MODE SEND
2000/1~
2000/1
TO YEAR?
  
```

--- Month selected in step 1, above

6. Enter the year that ends the period of data you want to send and press **TIME/DATE.**
7. Enter the month and press **TIME/DATE.**
 - If the month/year you enter comes before the month/year of the calendar you selected in step 1, the starting and ending calendars are switched automatically.
8. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.
 - To abort the send operation at any time, press **ESC**.
 - If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
9. After the send operation is complete, the display returns to the calendar selected in step 1 above.

PART 7

Technical Reference

Keys

Key Cap	Name	Function
CAL/CONV	Calculator Mode and Conversion Mode key	Press this key to enter the Calculator Mode or Conversion Mode.
CALENDAR	Calendar key	Press this key to enter the Calendar Mode.
CAPS	Caps key	Press this key to shift-lock the keyboard between upper-case and lower-case characters.
CODE	Code key	Use this key to input accented characters.
►	Cursor Right key	Press this key to move the cursor to the right.
◄	Cursor Left key	Press this key to move the cursor to the left.
▲	Cursor Up key	Press this key to move the cursor up, or to scroll the display.
▼	Cursor Down key	Press this key to move the cursor down, or to scroll the display.
DEL INS	Delete/Insert key	- Press this key to delete the character at the current cursor position. Holding down this key deletes characters at high speed. - Press SHIFT and then INS key to open a space at the current cursor position. Holding down this key inserts spaces at high speed.
DISP CHNG	Display Change key	- Press this key to switch between the index display format and the data display format. - In the Conversion modes, pressing this key toggles between general conversion and euro conversion.

Key Cap	Name	Function
ESC	Escape key	Press this key to interrupt any operation.
FUNC	Function key	Press this key to display function menus.
HOME/ WORLD	Home/World Time key	Press this key to display the current Home Time and World Time.
A : Z	Letter keys	Press these keys to enter the corresponding letter. Use the CAPS and SHIFT key to switch between upper-case and lower-case letters.
LIGHT	Light key	Press this key to light up the display.
MEMO/ TO DO	Memo and To Do Mode key	Press this key to enter the Memo Mode or To Do Mode.
↵	Newline key	Press this key to create a new line within a data entry.
NEXT CAPA	Next/Capacity key	- Press this key to complete input of a data entry and move to the next data entry. - Press SHIFT and then hold down CAPA key when you want to display the current status of the memory.
1 : 0	Numeric keys	Press these keys to enter the corresponding number.
OFF	Off key	Press this key to switch power off.
ON CLEAR	Power On/Clear key	- Press this key to switch power on. - Press this key to clear the display.
EXP/REM	Expense and Reminder Mode key	Press this key to enter the Expense Mode or Reminder Mode.
SCHEDULE	Schedule Mode key	Press this key to enter the Schedule Keeper.

Key Cap	Name	Function
SEARCH	Search key	Press this key to start a search for data stored in memory.
	Secret key	Use this key to register a password, to access the secret memory area, and to exit the secret memory area.
SET	Set key	Press this key to store input data into memory.
SHIFT	Shift key	Press this key to temporarily shift the keyboard for one character.
SPACE	Space key	Press this key to input a space.
SYMBOL	Symbol key	Press this key to display a menu of symbols on the display.
TEL	Telephone Directory key	Press this key to enter the Telephone Directory.
TIME/DATE CONTRAST	Time/Date/Contrast key	• Press this key to enter values that represent hours, minutes, years, months, or dates. • Press SHIFT and then CONTRAST key when you want to adjust the brightness of the display.

For information on the **AC**, **C**, **MC**, **MR**, **M-**, **M+**, $\sqrt{}$, **%**, **+**, **-**, **x**, **÷**, and **=** keys, see "About the Calculator Mode keys..." on page 77.

Storage Capacity

The 128K (SF-4900ER)/256K (SF-4980ER/SF-4985ER) bytes memory capacity includes a 126,306 (SF-4900ER)/257,378 (SF-4980ER/SF-4985ER) bytes user area. The following shows examples of what this means for the storage of data in each mode.

Telephone Directory

Approximately 6,000 (SF-4900ER)/12,200 (SF-4980ER/SF-4985ER), under the following conditions:

- 8-character name
- 10-character telephone number

Approximately 3,000 (SF-4900ER)/6,100 (SF-4980ER/SF-4985ER), under the following conditions:

- 8-character name
- 10-character telephone number
- 20-character address (E-mail/home)

Memo

Approximately 5,700 (SF-4900ER)/11,600 (SF-4980ER/SF-4985ER), 20-character memos.

Schedule Keeper

Approximately 3,800 (SF-4900ER)/7,700 (SF-4980ER/SF-4985ER), under the following conditions:

- 1 item per day, 20 characters per item
- 30 days per month
- Starting time specified, alarm time set

Approximately 4,500 (SF-4900ER)/9,100 (SF-4980ER/SF-4985ER), under the following conditions:

- 1 item per day, 20 characters per item
- 30 days per month
- Starting time specified, no alarm time

To Do

Approximately 4,600 (SF-4900ER)/9,500 (SF-4980ER/SF-4985ER), 20-character items.

Expense

Approximately 4,300 (SF-4900ER)/8,800 (SF-4980ER/SF-4985ER), under the following conditions:

- 4 items per day, 30 days per month
- up to \$999.99 per amount item
- 8-character payment type
- 8-character expense type

Reminder

Approximately 7,400 (SF-4900ER)/15,100 (SF-4980ER/SF-4985ER), under the following conditions:

- 10 characters per item
- Alarm time set

Approximately 8,400 (SF-4900ER)/17,100 (SF-4980ER/SF-4985ER), under the following conditions:

- 10 characters per item
- No alarm time

Auto Sort Sequence

Telephone Directory data items are automatically sorted in alphabetical order according to the first letter in the NAME entry. The following table shows the sequence used for data sorts.

1	\$	31	=	61	[	91	{	121	â	151	ij
2	(space)	32	>	62	\	92		122	ê	152	æ
3	!	33	?	63	]	93	}	123	î	153	ç
4	"	34	@	64	^	94	~	124	ô	154	â
5	#	35	A	65	a	95	À	125	û	155	ø
6	\$	36	B	66	b	96	É	126	ç	156	£
7	%	37	C	67	c	97	Í	127	Ä	157	¥
8	&	38	D	68	d	98	Ó	128	È	158	Ω
9	'	39	E	69	e	99	Ú	129	Ï	159	®
10	(	40	F	70	f	100	À	130	Ö	160	º
11	)	41	G	71	g	101	È	131	Ü	161	x
12	*	42	H	72	h	102	Ì	132	Å	162	÷
13	+	43	I	73	i	103	Ò	133	Ö	163	±
14	,	44	J	74	j	104	Ù	134	Ñ	164	°
15	—	45	K	75	k	105	Â	135	Í	165	ˆ
16	.	46	L	76	l	106	Ê	136	Æ	166	˜
17	/	47	M	77	m	107	Î	137	Ç	167	μ
18	0	48	N	78	n	108	Ô	138	À	168	½
19	1	49	O	79	o	109	Û	139	Φ	169	¼
20	2	50	P	80	p	110	ı	140	Β	170	¾
21	3	51	Q	81	q	111	á	141	Π	171	/
22	4	52	R	82	r	112	é	142	ϕ	172	
23	5	53	S	83	s	113	í	143	ä	173	Fr
24	6	54	T	84	t	114	ó	144	ë	174	←
25	7	55	U	85	u	115	ú	145	ï	175	→
26	8	56	V	86	v	116	à	146	ö	176	√
27	9	57	W	87	w	117	è	147	ü	177	€
28	:	58	X	88	x	118	ì	148	ā		
29	;	59	Y	89	y	119	ò	149	ō		
30	<	60	Z	90	z	120	ù	150	ñ		

Message Table

Message	Meaning	Action
NO DATA!	Search operation attempted when no data is stored in memory.	Current search operation cannot be performed.
NOT FOUND!	Data specified in search operation does not exist in memory.	Change specification or cancel search.
MEMORY FULL!	No more room in memory for storage of data.	Delete unnecessary data items from memory.
ALARM TIME ALREADY USED!	Attempt to set a Schedule Keeper or a Reminder alarm time that is already used for another entry.	Set a different alarm time or change the existing alarm time to another one.
ALARM TIME ALREADY PASSED!	Attempt to set a Schedule Keeper alarm time for a time/date that is already passed.	Set a different alarm time (for a future time/date).
SECRET DATA!	Alarm for a secret memory area data item is sounding.	Enter the secret memory area to view details of the alarm.
PASSWORD MISMATCH!	Attempt to enter the secret memory area using a password that does not match the one preset for the secret area.	Use the correct password.
TRANSMIT ERROR!	Error during data communications.	Cancel the data communications operation and try again.
DATA ERROR! CHECK YOUR USER'S GUIDE FOR PROCEDURE!	Data corrupted by strong impact, electrostatic charge, etc.	See page 14 of this manual.

Message	Meaning	Action
ARE YOU USING A NEW UNIT FOR THE FIRST TIME? YES/NO	This is the first time you have turned the power on after purchasing the unit.	See "Before using the unit for the first time" (page 1).
CLEAR MEMORY AND SET UP THE UNIT FOR OPERATION? YES/OFF	Data corrupted by strong impact, electrostatic charge, etc.	See page 14 of this manual.
WEAK BATTERIES! CONSULT YOUR USER'S GUIDE IMMEDIATELY!	The batteries are getting weak.	Replace batteries immediately (page 17).

Specifications

Model: SF-4900ER/SF-4980ER/SF-4985ER

Main Modes:

Telephone Directory, Memo, Schedule Keeper, To Do, Expense, Reminder, Calendar, Home Time, World Time, Calculator, General Conversion and Euro Conversion.

Data storage:

Storage and recall of telephone, memo, schedule, to do, expense, reminder data; calendar display; secret memory area; editing; memory status display

Clock:

World time; reminder alarm; schedule alarm; daily alarm; accuracy under normal temperatures: average ± 3 seconds per day

Calculation:

10-digit arithmetic calculations; arithmetic constants (+, -, $\times$, $\div$); independent memory; percentages; square roots; 20-digit approximations; date calculations; other mixed calculations

General:

Display element: 16-column $\times$ 4-line LCD

Memory capacity: SF-4900ER: 128KB
SF-4980ER/SF-4985ER: 256KB

Main component: LSI

Power supply: 3 lithium batteries (CR2032)

Power consumption: 0.2W

- Battery life:**
- Approximately 170 hours of continuous display only in Telephone Mode.
 - Approximately 100 hours with 55 minutes of continuous display only and 5 minutes of processing operation per hour.
 - Approximately 45 hours with 55 minutes of continuous display only and 5 minutes of processing operation per hour, plus 3 minutes of backlight operation per hour during continuous display only period.

Auto power off: Approximately 6 minutes after last key operation

Operating temperature: 0°C ~ 40°C (32°F ~ 104°F)

Dimensions:

Unfolded: 12.2H $\times$ 143W $\times$ 160D mm ($1\frac{1}{2}$ "H $\times$ $5\frac{5}{8}$ "W $\times$ $6\frac{1}{4}$ "D)

Folded: 15H $\times$ 143W $\times$ 82D mm ($\frac{5}{8}$ "H $\times$ $5\frac{5}{8}$ "W $\times$ $3\frac{1}{4}$ "D)

Weight: Approximately 120g (4.2 oz) including batteries